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A Study of the Development of the Tri-Cities, Pasco, Kennewick, and Richland, Washington

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A STUDY OF THE DEVELOPMENT OF THE TRI-CITIES, PASCO, KENNEWICK, AND RICHLAND, WASHINGTON

This thesis is submitted in partial fulfillment of the requirements for the degree, Master of Science in Education.

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TABLE OF CONTENTS

Preface

The Tri-City community is indeed a fast-growing area of the United States. Productive orchards and vineyards, as well as sage-brush areas, are giving way to housing developments and businesses. Great emphasis and concern is given to the actions of the United States Government. The government holds the key for the continued residence of much of the population, and its actions control the future development of this area. Has this always been the case? Why do most of the people seem to be from somewhere other than this area? A desert region usually is capable of providing for only a relatively small population. Why, then, are some sections of this area teeming with people while others are ghost towns? Have the rivers had an effect on the development of this part of Washington? These and other questions have intrigued this writer since he became a resident of Kennewick in August of 1955. This study has been made to gain a better understanding of this area, and to satisfy this writer's curiosity concerning the factors which determined which determined the development of the cities.

Acknowledgments

The writer wishes to recognize the contributions made by many persons. Acknowledgments are made in the study where feasible, but it is impossible to mention the many residents of the Tri-Cities who have freely given of their time and information through interviews. Dr. Rose Zeller, formerly of Eastern Illinois University,

gave much encouragement in the continued study of geography. Special thanks are due to Dr. Dalias Price and Dr. Elwyn Martin of Eastern Illinois University for their time and efforts to guide and direct the final form of this study. Ralph Smith, chief photographer for the Tri-City Herald, printed many of the old-time photographs under the writer's direction. Thanks to Mrs. Kermit Radloff for the typing of the final copy of this thesis. Last, but not least, to my family and colleagues, sincere appreciation for the sacrifices they cheerfully endured during the many months of study.

LIST OF MAPS AND GRAPHS

LIST OF PHOTOGRAPHS

Page

Page

Page

CHAPTER I

INTRODUCTION: STATEMENT OF PROBLEM

It is the purpose of this study to ascertain the factors in the development of the Tri-Cities and their immediate vicinity; to understand how the cities came to be established where they are; to analyze the reasons for their growth, present status, and the prospect for the future of the community.

Geographers are always interested in the areal distribution of man over the face of the earth, and seek to determine the various factors which induce settlement. The understanding of the present status of a community can only be attained by determining how it has evolved out of the past. This understanding can greatly enhance the further understanding of present significant problems, and those which might be faced in the future.

Although this area of Southeastern Washington was considered waste land during the nineteenth century, the Tri-Cities and surrounding metropolitan area presently has a population of about 100,000 - the fourth largest in Washington State.[1] Were there geographical factors which helped to determine the

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[1] According to 1959 population estimates by the U. S. Post Office Department.

location of Pasco, Kennewick, and Richland? What part has irrigation played in the development of the cities? How have environmental factors, location, climate, soil, affected the growth of the cities? What factors determined the change in the agricultural pattern of the immediate vicinity? What impact have United States government installations - Hanford Atomic Plant, dams, reclamation projects, Reconsignment and Storage Depot, and the naval air station - had on the development of the Tri-City community? What has the progress of water, land, and air transportation done for the development of this area? In addition to the above, the relative status and prospect of each city, as well as the entire area, will be analyzed.

Scope of the Study

This study is purposely limited to a relatively small area of Southeastern Washington. Major emphasis is placed upon the development of the three urban centers of Pasco, Kennewick, and Richland.

Although there are many interesting human interest phases in the development of these cities, only those are considered which are of geographic interest. When the population of the Tri-City area as a whole is discussed, adjacent portions of Walla Walla County are included. However, the major emphasis of this study is concentrated in Benton and Franklin Counties.

The Walla Walla Port District has done much to develop industrial sites and has succeeded in inducing major industries to locate adjacent to Pasco. This has affected the Tri-City economy and population. But, for reasons of limitation, this will not be a part of this study.

Research Techniques

The following research techniques were used in obtaining and evaluating materials:

1. Many newspapers of the past from various cities in Washington and Oregon were consulted, and extensive notes were taken over a period of three years.

2. Pamphlets, books, and literature from various libraries and from the General Electric Company were gathered and analyzed for pertinent information.

3. The historical picture file was made available by special permission, and contact prints were made with the able assistance of chief photographer, Ralph Smith, of the Tri-City Herald.

4. Field work.

   a) By arrangement, permission was granted to take the 120-mile tour of the Hanford Atomic Reservation with an employee.

   b) Photographs of special points of geographic interest were taken for later evaluation and analysis.

c) Interviews were held with old time residents of each of the three cities to obtain information, and again later to verify written material.

d) Notes were taken at the first organizational meeting of the Benton County Historical Society to arrange interview contacts. Notes were also taken on a special television program entitled, "Inside Hanford".

5. Maps, charts, graphs, and important data were obtained from the chamber of commerce of each city and from the Kennewick Port district manager.

CHAPTER II

SETTING OF THE ENTIRE AREA

Geographic Position in the State of Washington

The Tri-Cities are located on the southern edge of the Columbia Basin near the confluence of the Snake River and Yakima River with the Columbia River. Storage water upstream from McNary Dam on the Columbia River forms a large reservoir, Lake Wallula, which separates the cities of Pasco and Kennewick. The city of Richland is located approximately seven miles northwest of Kennewick. The position of these cities in relationship to other parts of the state and to each other is shown by the following maps. (Figures 1 and 2).

Nature of the Site

Geologists say that the location of the Tri-Cities and adjacent lands was once an immense lake, fed by numerous mountain streams. Some evidence of this may be seen in the canyons of the Horse Heaven Hills and the Rattlesnake Hills. (Figure 3). Geologists also tell us that tremendous cataclysms must have occurred in the Northwest, forming the mighty Cascade Mountains. As this uplift occurred, the inland sea was emptied, cutting

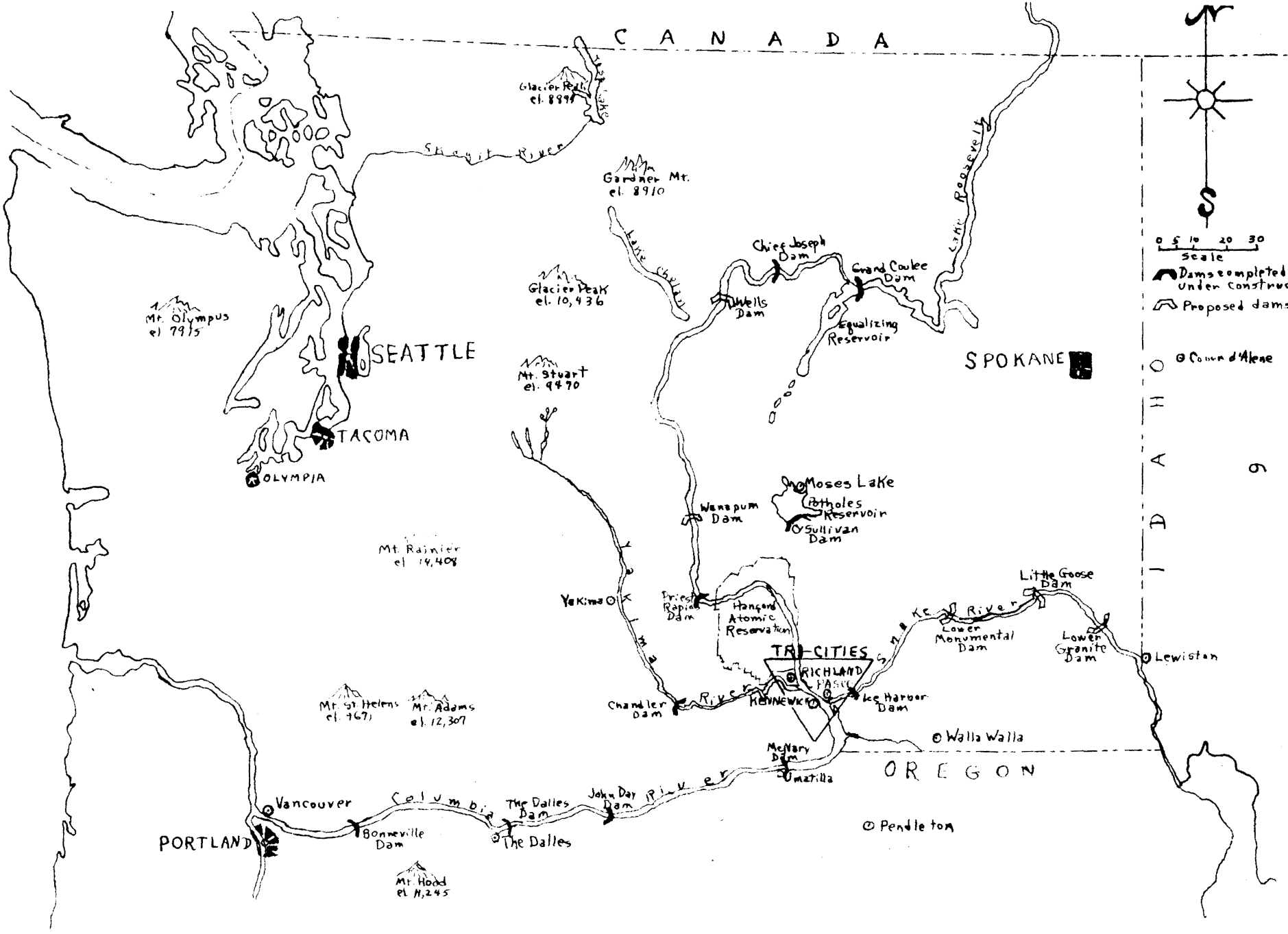


FIG. 1 **LOCATION MAP**

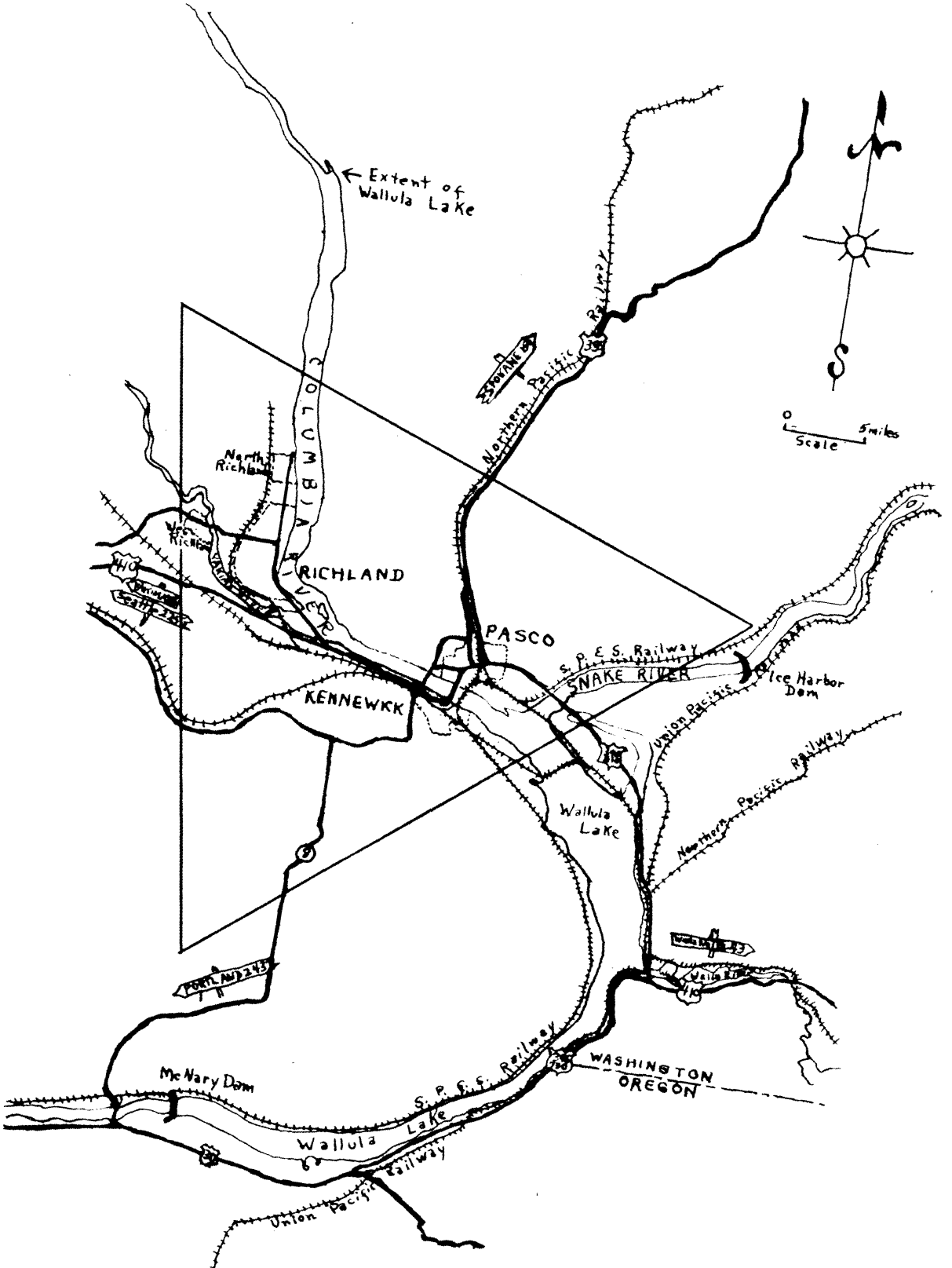


FIG. 2 THE TRI-CITIES

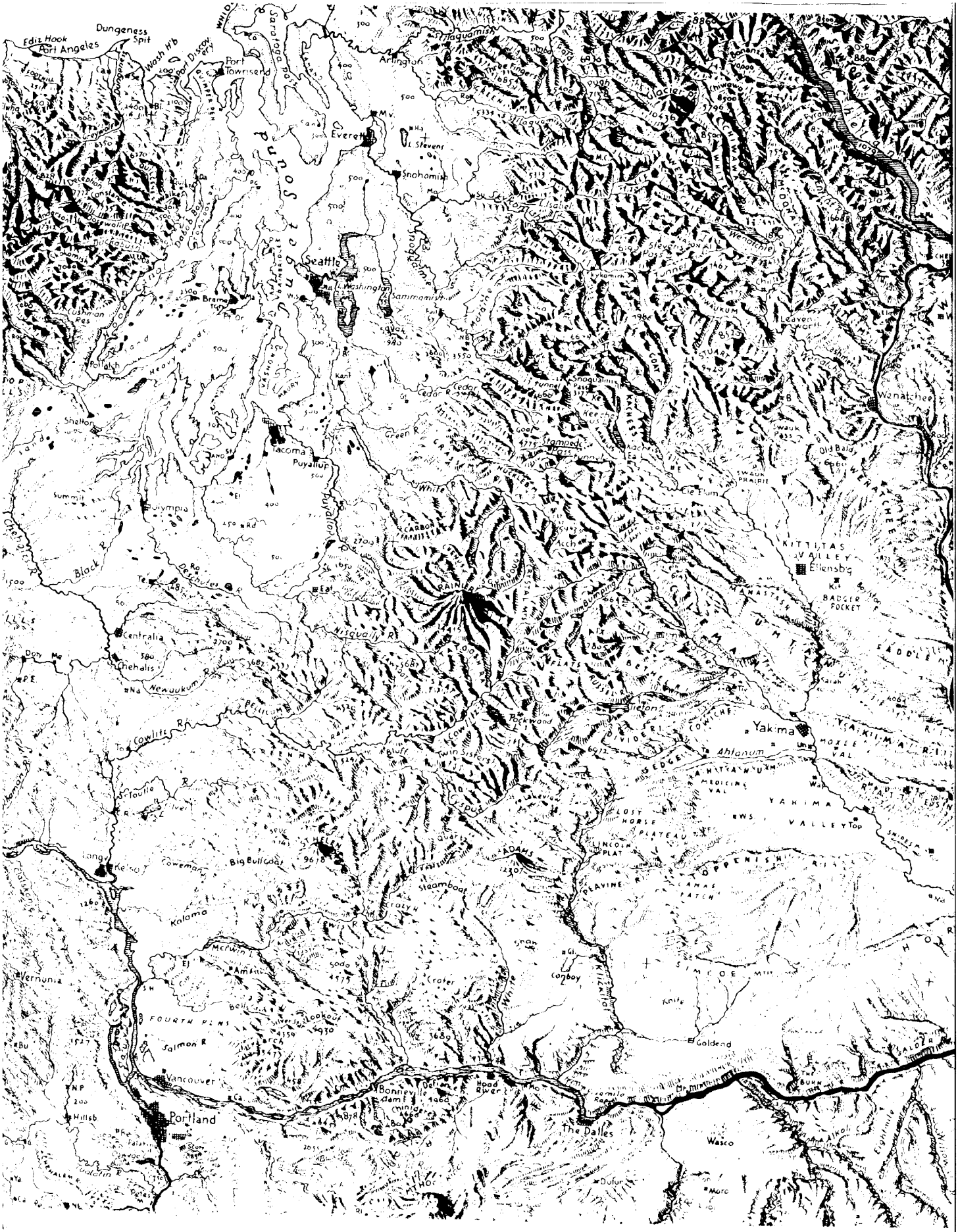
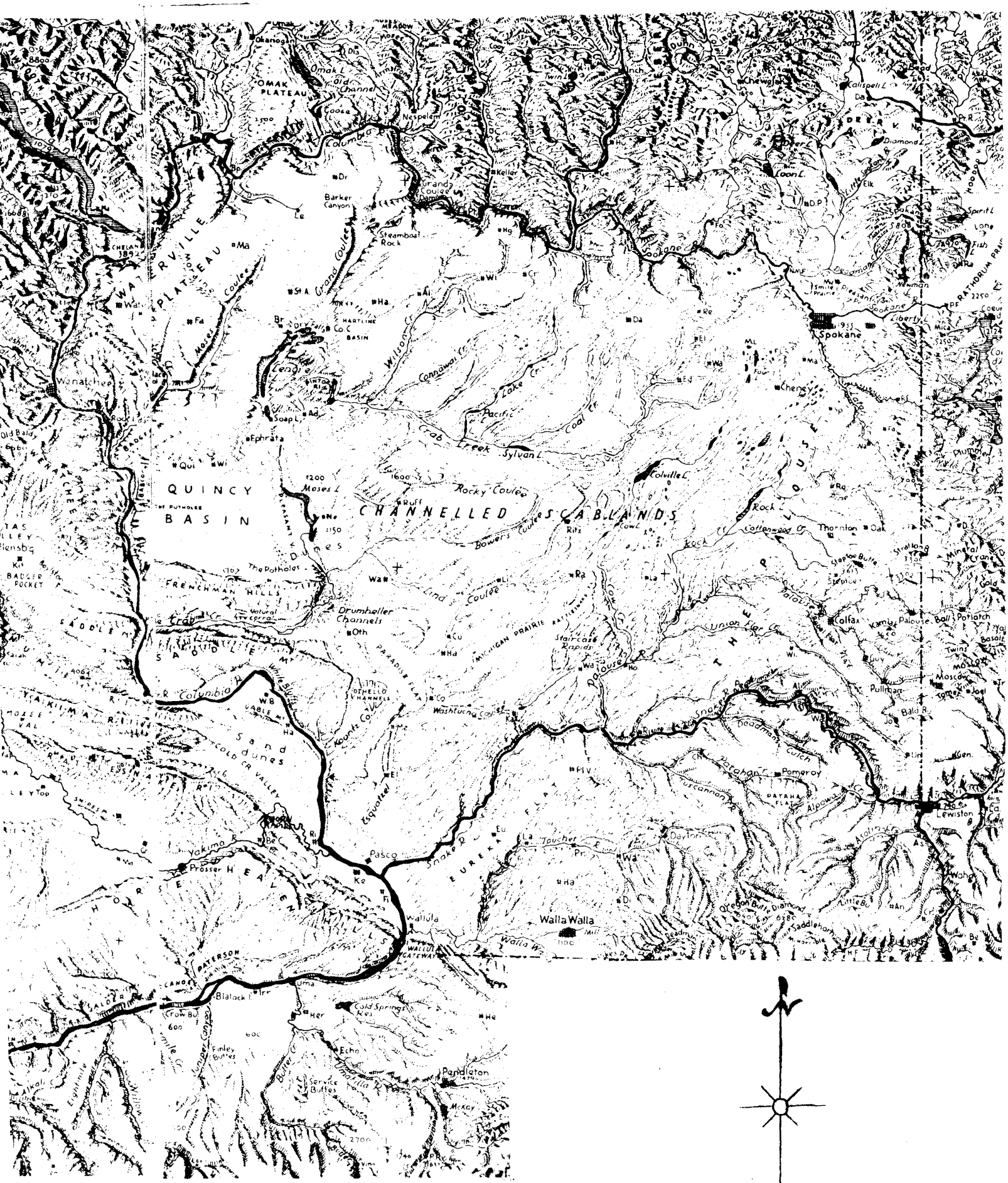


FIG.3 **LANDFORMS MA**


OMAK PLATEAU
Okanogan
Omak L.
Old Channel
Cooke
Nespelem
Columbia R.
Grand Coulee
Barker Canyon
Steamboat Rock
Keller
Spokane R.
Loon L.
Deer L.
Diamond L.
Chewelah
Colville R.
Spokane
Liberty L.
Mica
Wenatchee
Moses Coulee
Lenore
Soap L.
Ephrata
Wilson Cr.
Connawai Cr.
Lake
Pacific
Coal Cr.
Crab Creek
Sylvan L.
Colville L.
QUINCY
BASIN
CHANNELLED SCABLANDS
Moses L.
Rocky Coulee
Bowers Coulee
Rock Cr.
Cottonwood Cr.
Thornton
Rock Lake
Ritzville
Lind Coulee
Drumheller Channels
FRENCHMAN HILLS
The Potholes
Natural Rock Corral
SADDLE MTS.
Crab Cr.
Columbia R.
White Bluffs
Othello Channels
Paradise Flat
Michigan Prairie
Washtucna Coulee
Palouse R.
Union Flat Cr.
Colfax
Pullman
Moscow
Snake R.
Penawawa
Pomeroy
Alpowa
Lewiston
Clarkston
Dayton
Touchet R.
Walla Walla
Wallula
Wallula Gap
Prosser
Yakima R.
Horse Heaven Hills
Sand dunes
Cold Cr. Valley
Esquatzel
Pasco
Kennewick
Snake R.
Eureka Flat
Patterson
Blalock I.
Irrigon
Umatilla
Cold Springs Res.
Echo
Pendleton
Umatilla R.
Butter Cr.
Service Buttes
Finley Buttes
Oregon Butte
Saddle Horn
Diamond Peak
Deadman
Little Butte
Wahluke
Othello
Quincy
Ephrata
Soap L.
Moses L.
Wenatchee
Spokane
Colfax
Pullman
Lewiston
Clarkston
Walla Walla
Pasco
Kennewick
Prosser
Dayton
Pomeroy
Ritzville
Davenport
Coulee City
Grand Coulee Dam
Chief Joseph Dam
Wanapum Dam
Priest Rapids Dam
Rock Island Dam
Wells Dam
Bonneville Dam
The Dalles Dam
John Day Dam
McNary Dam
Ice Harbor Dam
Lower Monumental Dam
Little Goose Dam
Lower Granite Dam
Dworshak Dam
Libby Dam
Hungry Horse Dam
Albeni Falls Dam
Boundary Dam
Waneta Dam
Mica Dam
Revelstoke Dam
Arrow Lakes
Kootenay Lake
Duncan Lake
Kinbasket Lake
Williston Lake
Peace River
Fort St. John
Dawson Creek
Prince George
Quesnel
Williams Lake
Kamloops
Vernon
Penticton
Osoyoos
Oroville
Tonasket
Republic
Kettle Falls
Colville
Chewelah
Deer Park
Newport
Priest River
Sandpoint
Bonners Ferry
Kellogg
Wallace
Coeur d'Alene
Post Falls
Lewiston
Clarkston
Moscow
Pullman
Colfax
Palouse
Asotin
Dayton
Waitsburg
Prescott
Walla Walla
College Place
Milton-Freewater
Hermiston
Boardman
Irrigon
Umatilla
Arlington
Condon
Fossil
Shaniko
Madras
Redmond
Bend
Prineville
Sisters
Sweet Home
Albany
Corvallis
Salem
Oregon City
Portland
Vancouver
Longview
Kelso
Centralia
Chehalis
Olympia
Tacoma
Seattle
Everett
Bellingham
Mount Vernon
Anacortes
Friday Harbor
Port Angeles
Sequim
Port Townsend
Bremerton
Shelton
Aberdeen
Hoquiam
Raymond
South Bend
Long Beach
Ilwaco
Astoria
Seaside
Cannon Beach
Tillamook
Lincoln City
Newport
Florence
Reedsport
Coos Bay
North Bend
Bandon
Port Orford
Gold Beach
Brookings
Crescent City
Eureka
Arcata
Fortuna
Ferndale
Blue Lake
Willow Creek
Hoopa
Weitchpec
Orleans
Somes Bar
Happy Camp
Yreka
Weed
Mount Shasta
Dunsmuir
Redding
Anderson
Cottonwood
Red Bluff
Corning
Orland
Willows
Williams
Colusa
Woodland
Davis
Vacaville
Fairfield
Vallejo
Benicia
Martinez
Concord
Walnut Creek
Oakland
Alameda
San Leandro
Hayward
Fremont
Newark
Union City
San Jose
Santa Clara
Sunnyvale
Mountain View
Palo Alto
Menlo Park
Redwood City
San Mateo
Burlingame
San Francisco
Daly City
Pacifica
Half Moon Bay
Santa Cruz
Capitola
Watsonville
Hollister
San Juan Bautista
Gilroy
Morgan Hill
Salinas
Monterey
Pacific Grove
Carmel
Big Sur
San Simeon
Cambria
Morro Bay
San Luis Obispo
Arroyo Grande
Pismo Beach
Guadalupe
Santa Maria
Lompoc
Santa Barbara
Goleta
Carpinteria
Ventura
Oxnard
Port Hueneme
Camarillo
Thousand Oaks
Simi Valley
Moorpark
Fillmore
Santa Paula
Ojai
Los Angeles
Glendale
Burbank
Pasadena
Alhambra
San Gabriel
Monterey Park
El Monte
Whittier
La Habra
Fullerton
Anaheim
Orange
Santa Ana
Tustin
Irvine
Laguna Beach
Dana Point
San Clemente
Oceanside
Carlsbad
Encinitas
Solana Beach
Del Mar
San Diego
Coronado
Imperial Beach
Chula Vista
National City
El Cajon
La Mesa
Lemon Grove
Spring Valley
Santee
Poway
Escondido
San Marcos
Vista
Fallbrook
Temecula
Murrieta
Hemet
San Jacinto
Perris
Moreno Valley
Riverside
Corona
Norco
Jurupa Valley
Ontario
Upland
Rancho Cucamonga
Claremont
La Verne
San Dimas
Glendora
Azusa
Covina
West Covina
Baldwin Park
Irwindale
Duarte
Monrovia
Arcadia
Temple City
Rosemead
South El Monte
Montebello
Pico Rivera
Santa Fe Springs
Whittier
La Habra
Brea
Placentia
Yorba Linda

Wallula Gap, and the water was on its way to the Pacific Ocean.[2] The extinct volcanoes, Mts. Rainier, Adams, and Hood are visible from the hills south and west of the cities.

What about glaciation? Did the glaciers ever cross lands of this area? If not, how do we account for those smooth, giant, granite boulders found scattered in isolated sections away from rocks of similar character? We have no granite hills or deposits within 200 miles of this section. "The former presence of a glacier in a region is recognized by the deposits that it left when it melted away. Such deposits contain almost incredible amounts of rock debris and such debris must have been picked up in some way and either carried or pushed along... In size these materials range from boulders forty or fifty feet in diameter to clay particles... The number of kinds of rock contained in glacial drift is surprising."[3] Any excavation in the Tri-City area will show a heterogeneous glacial till of rounded gravel particles and boulders. (Figure 4). These glacial deposits form the base material for the soil in this area. This glacial soil has been a factor in the agricultural economy of the area, and of the development of the cities.

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[2] W. D. Lyman, History of the Yakima Valley (S.J.Clarke Publishing Co., 1919), I, pp. 845-846.

[3] E. B. Branson and W. A. Tarr, Introduction to Geology (First Edition; McGraw Hill, 1935), pp. 229-231.

MAY 1959

Fig. 4. An excavation in Kennewick showing glacial till.

According to Gus Reese, Horse Heaven wheat farmer, a well drilled on his ranch revealed forty-nine feet of topsoil known as volcanic ash. Then followed a mixture of soil and rounded rock particles showing no orderly layer arrangement. Solid basalt was reached at the 120 foot level. He stated that a neighbor's well revealed over eighty feet of volcanic ash topsoil.[4]

Climate

The climate of this area is a semi-arid type. However, some of the characteristics of both marine and continental climates can be observed.

Mountain ranges in Washington, Oregon, Idaho, and British Columbia play an important role in the climate of the Tri-City area. These mountain ranges form a protective barrier on all sides of the Columbia Basin. The Tri-Cities, located at an average elevation of 400 feet, are the lowest in the state east of the Cascade Mountains. The natural air and water drainage from the entire Columbia Basin - an area almost as large as France and twice the size of the British Isles - is toward the Tri-City area. The only outlet for the flow of heavier, cold air, is a narrow passage along the Columbia River.

During the winter season, warm, moist air from over the

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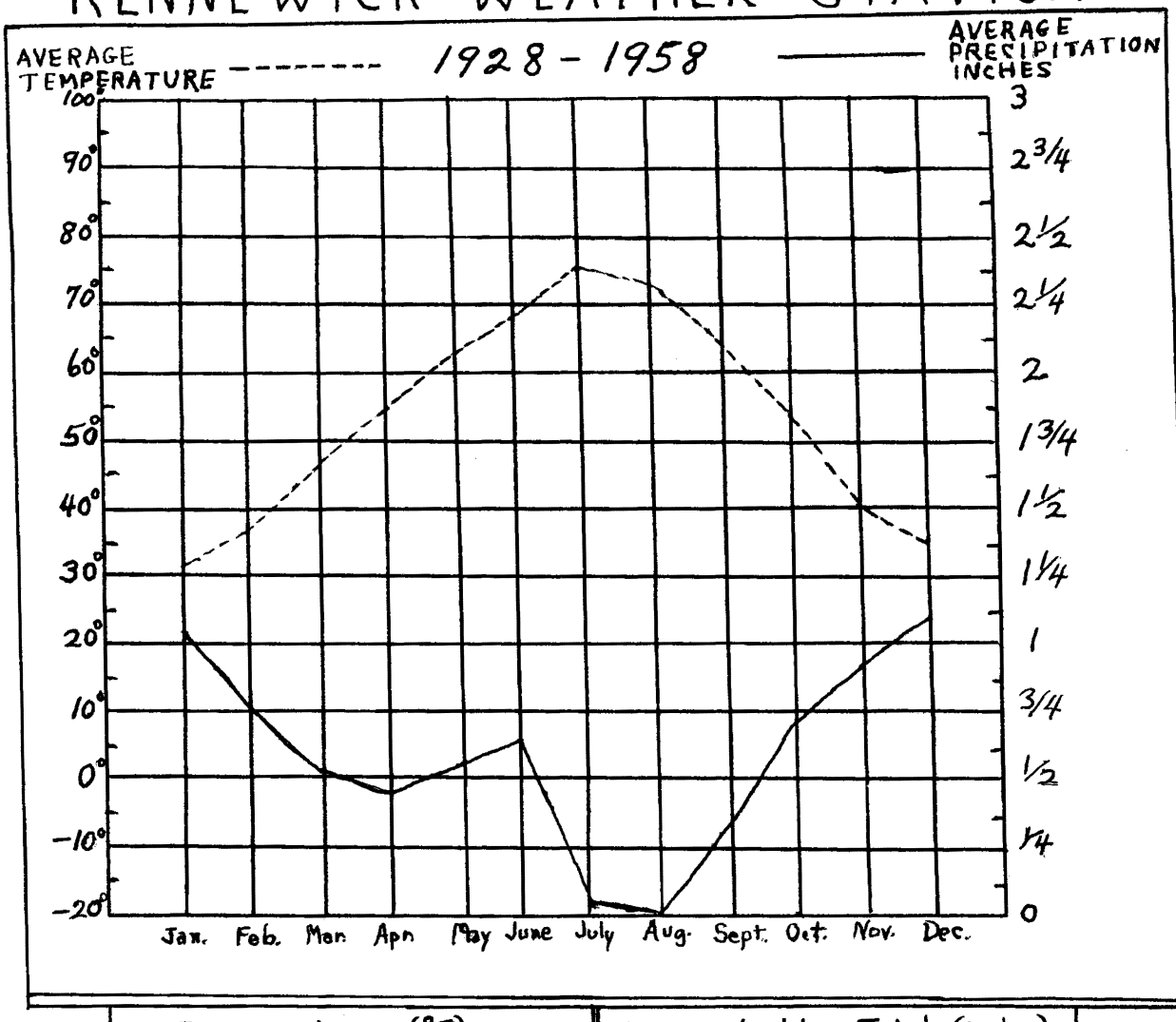
[4]Interview with Gus Reese, May 16, 1959.

Pacific Ocean frequently mixes with the cold air trapped in the Columbia Basin, thus forming low clouds and fog. These conditions can be expected to occur several days during each winter season. Mountain ranges north and east of the Columbia Basin shield this area from the colder weather experienced at similar latitudes east of these mountain ranges.

Chinook winds which bring about a rapid rise in temperature, occur rather frequently during the winter. Thus prolonged cold weather is quite unusual. Awareness of this phenomenon is accentuated by the Tri-City Herald. Contests are conducted in which readers attempt to predict the exact time of arrival of the chinook.

In a westerly direction, the Cascade Mountains rise to elevations of 5,000 to 7,000 feet and form a north-south barrier across the state. Warm, moist air moving eastward from the Pacific Ocean cools and loses a large amount of moisture as it rises over the Cascade Mountains. The air becomes warmer and drier as it moves down the eastern slope of the mountains. Thus precipitation decreases and the rate of evaporation increases as the air moves toward the Tri-City area. The average annual precipitation is 7.37 inches. (Figure 5). More than fifty per cent of the annual precipitation occurs between October and February. There is an increase in precipitation in May and June followed by a sharp decrease in July. Most of the summer-time precipitation occurs

FIG. 5 CLIMATE
KENNEWICK WEATHER STATION



	Temperature (°F)							Precipitation Totals (inches)							
	Means			Extremes							Snow, Sleet				
	Daily Maximum	Daily Minimum	Monthly	Record Highest	Year	Record Lowest	Year	Mean	Greatest Daily	Year	Mean	Maximum Monthly	Year	Greatest Daily	Year
Year	65.6	41.5	53.6	115	1939	-27	1930	7.37	1.42	1942	13.5	25.5	1950	12.0	1940

Data from "Climatological Summary of the Kennewic Weather Station"
Earl L. Phillips, State Climatologist, Seattle, Washington.

as showers. It is not unusual for this area to receive only a trace or no precipitation during July and August. A few small thunderstorms can be expected each spring and summer. The average annual snowfall is about thirteen inches. However, the annual amounts have ranged from a trace to forty-six inches. The depth of snow on the ground seldom exceeds four to six inches.

Thus, irrigation is necessary for the production of crops in the valleys. Dryland wheat farming practices are followed on the nearby Horse Heaven Hills, which receive slightly more precipitation than the valley areas. The development of cities in this area, then, has had to depend on an agricultural economy of an irrigated hinterland, and dryland farming.

Maximum temperatures exceed ninety degrees on about thirty-five days of July and August. The highest and lowest temperatures recorded since 1894 are 115° and -29°. The average daily range of temperature increases from 14° in January to 33° in July. (Figure 5).

The long hours of daylight experienced at this latitude and the abundance of sunshine during the growing season (183 to 216 average frost-free days) provide excellent conditions for the production of fruit, vegetable, and field crops in the irrigated areas. Cherry and hay crops are sometimes damaged by the increased shower activity.

Early Indian Life

The Indian population in this area seems to have been a shifting one. The environment in the valley areas of the Tri-Cities was an inducement for larger settlement during the winter time. According to most reliable accounts, the name Kennewick was the Indian word meaning Winter Paradise. The small amount of precipitation and a climate warmer than on the higher elevations induced many to make the valley their winter home. Most of them returned to the higher elevations when the summer temperatures returned. The rivers also attracted the Indians. The spearing and seining of salmon was quite common, especially along the shallower Yakima River. Mrs. Albert Kent, an early resident in Kennewick, recalls that every autumn, more than 3,000 Indians would be camped in the valley areas feasting and taking advantage of the salmon run on the three rivers. The Lewis and Clark Expedition which arrived in this area in October speaks of the many dried fish which the Indians in this area had.

The many thousands of horses which roamed wild in the nearby hills also was an attraction for the Indians. Since the horse was the best method of overland travel the Indian had, the ownership of a large number of horses was an asset for any tribe. They could be traded with other tribes who did not have the access to the large numbers. The Tri-City valley areas were a good winter feeding place for the horses. (Figure 6).

Fig. 6. Indians with their horses along the Yakima River.

Some of the advantages which the Indians saw in this valley were also an inducement to the first settlers. The first ranchers were mostly concerned with the marketing of the wild horses. The rivers, too, were the key to development of subsistence and commercial agriculture. The mild winter climate and many days of sunshine (183 to 200 days) each year is predicted to make this a resort area for the sunshine-starved residents of Western Washington.

Early Visits by White Men

The first record of a visit by white men was in 1805. On October 16, 1805, the Lewis and Clark party set foot on the land at the confluence of the Snake and Columbia Rivers. A monument at Sacajawea State Park (Figure 7) now preserves this historical fact.

According to the annals of Lewis and Clark, they traveled west as far as the mouth of the Tapteal (Yakima) River. They had a feast with the Indians on Clover Island, near present-day Kennewick.

The next visit by white men seems to have been in 1811. A Northwest Company partner, David Thompson, passed through the area. He erected a pole at the junction of the Snake and the Columbia and on it fastened a notice that this was a British Post.

DEC 1958

Fig. 7. Lewis and Clark Expedition Monument. The inscription reads, "The Lewis and Clark Exploring Expedition made its first camp on the Columbia River October 16-18, 1805. This marker erected by the Washington State Historical Society, 1927."

"Thompson even planned a fort there for a time, but white men had little use for the area so lacking of adequate water and land transportation."[5]

During the early history of the development of this area, the same location chosen by Lewis and Clark served as a natural camping and stopping-off point along the river highway for the miners, trappers, and for the immigrants coming west. It was sort of a goal for travelers up the Columbia River and down the Snake River. However, few of the travelers remained in Benton and Franklin Counties until after 1900. "The census of 1890 gave Franklin County a population of only 696."[6]

Later Environmental Adaptations

It is impossible to mention all of the changes which white man has made in this area, triply blessed with rivers, sun, and land, plus the indescribable, fantastic development of atomic power. The Indian travois and the conestogas of the early settlers have been replaced by snarling trucks, horses by hotrods, false-fronts by graceful steel and stone buildings, and the legendary tent-downs by thousands of trailers, most of whose occupants will join a useful citizenry to build this modern colussus in the Three Rivers area of Southern Washington. The population growth (Figure 8)

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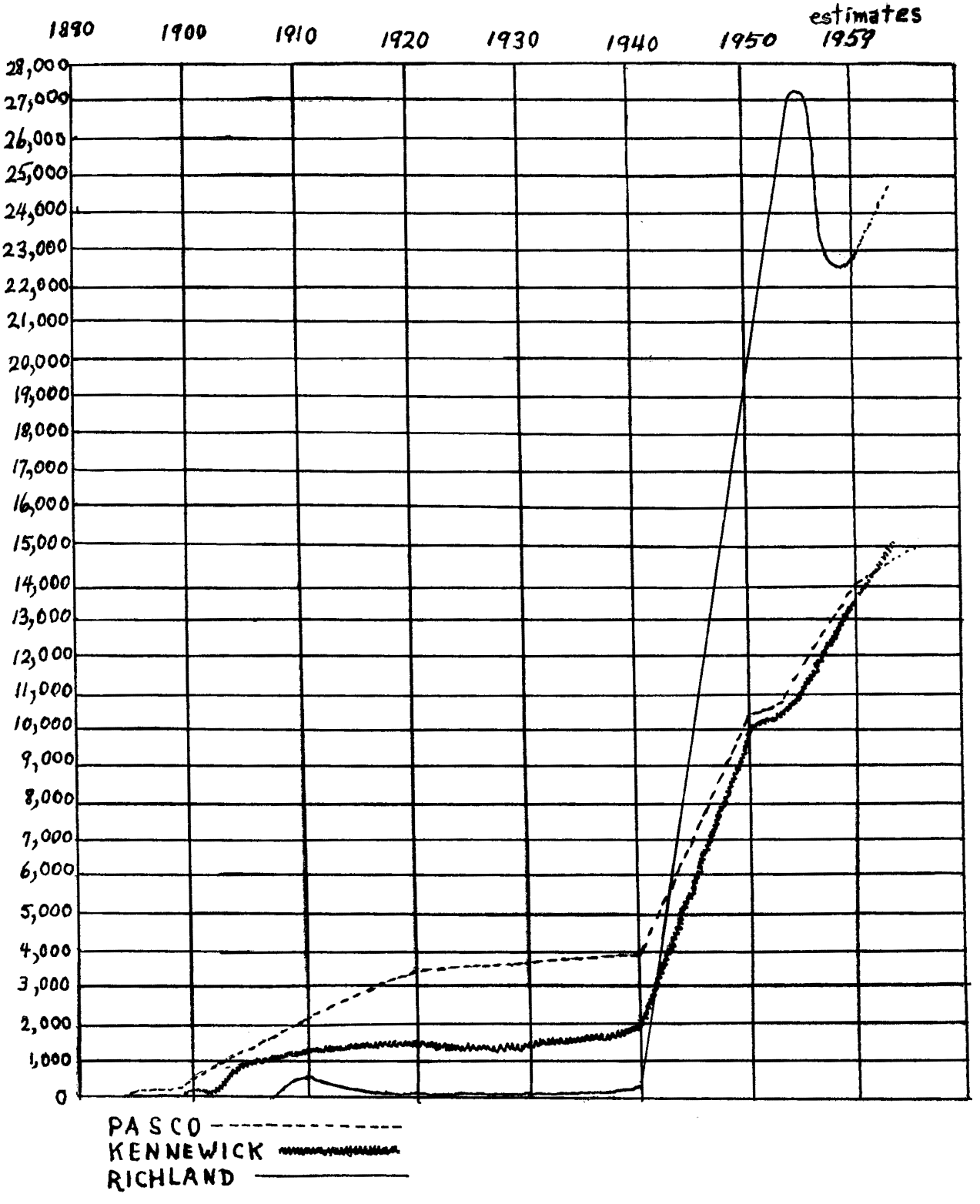
[5] Elizabeth Obrien, Pasco, from Sagebrush to Atoms, 1949.

[6] Illustrated History of the Big Bend Country (Spokane Western Historical Publishing Co., 1904), Part V, History of Franklin County. pp. 921-922.

FIG. 8 POPULATION



has been phenomenal in the last two decades.

The area is served by every conceivable modern transportation facility - rail, water, motor, and air. Such slogans as "Keep your eye on Pasco," "Watch Kennewich grow," and "Richland, the Atomic City," are indicative of the progressive thinking of its citizenry. The area is forging ahead in tremendous strides, aware of its destiny and key position in the rich Columbia Basin country.

Because of its location and hinterland, each city has its own individuality; Pasco, the nerve center of a growing industrial transportation and distribution center with rail yards, docks, and expanding airport; Kennewick, heart of the growing agricultural area of reclaimed arid land, the site of a fast-growing chemical industry, and the dormitory community for the area; Richland, site of the Hanford Atomic Works, where the Atomic Energy Commission helps plot the entry of America into the Golden Age. The reasons for this individuality will receive further emphasis in this thesis.

CHAPTER III

PASCO, THE TRANSPORTATION CITY

Ainsworth, the Railroad Camp

Ainsworth, Washington Territory, the predecessor to Pasco, came about as a result of an engineer's mistake. In 1879, the Northern Pacific Railroad Company decided to build a northwest transcontinental line from Lake Superior to the West Coast. Engineers were immediately hired to lay out a route from the Great Lakes to the Rocky Mountains. Following the pattern of the Union Pacific, another crew of engineers and construction men started similar operations working east from Ainsworth.

Rivers have always been major barriers to land transportation. The engineers had planned for the railroad to go through Spokane, on down to about a mile above the Columbia River and cross the smaller of the two natural water barriers, the Snake River at this point. Where the terrain of a river flood plain would permit, the line was laid out at least one mile away from the river. This was because the U. S. Government land grants to the railroad specified that they were to receive every other square mile of land on both sides of the railroad. So the specifications for the first Snake River Bridge called for building it at least this distance upstream from

the junction of the Snake with the Columbia. From this bridge, then, the railroad was to follow the natural gravity grade along the south side of the Columbia River, the widest flood plain, down to Portland, Oregon. (Figure 9). From there, it would continue along the coastal plain up to Tacoma and Seattle. Although it was a circuitous route to the Pacific Coast of Washington, this route would by-pass the greatest natural physical barrier, the Cascade Mountains. Since construction on a river flood plain is always more economical than construction through mountains, the engineers' plans were approved and construction was begun.

Building bridges during a time when horses and men were the only sources of power, required a large construction crew. So, for the construction of the Ainsworth Bridge, a temporary camp was constructed just south of the bridge on the west side of the river. (Figure 10). Most of the first residents in this camp first lived in tents. Later, boards from the newly-constructed sawmill provided a material which would shelter them from the sunshine, extreme temperatures, and blowing sand. The sawmill was located on the peninsular point directly at the mouth of the Snake (now Sacajawea Park) so that it could be advantageously situated for the log rafts which came down both rivers from the wooded mountain areas. The town of Ainsworth, at the peak of bridge construction, was claimed to have a population of nearly 1,500, most of whom were Irish and Chinese workers, the cheapest labor available at that time. The

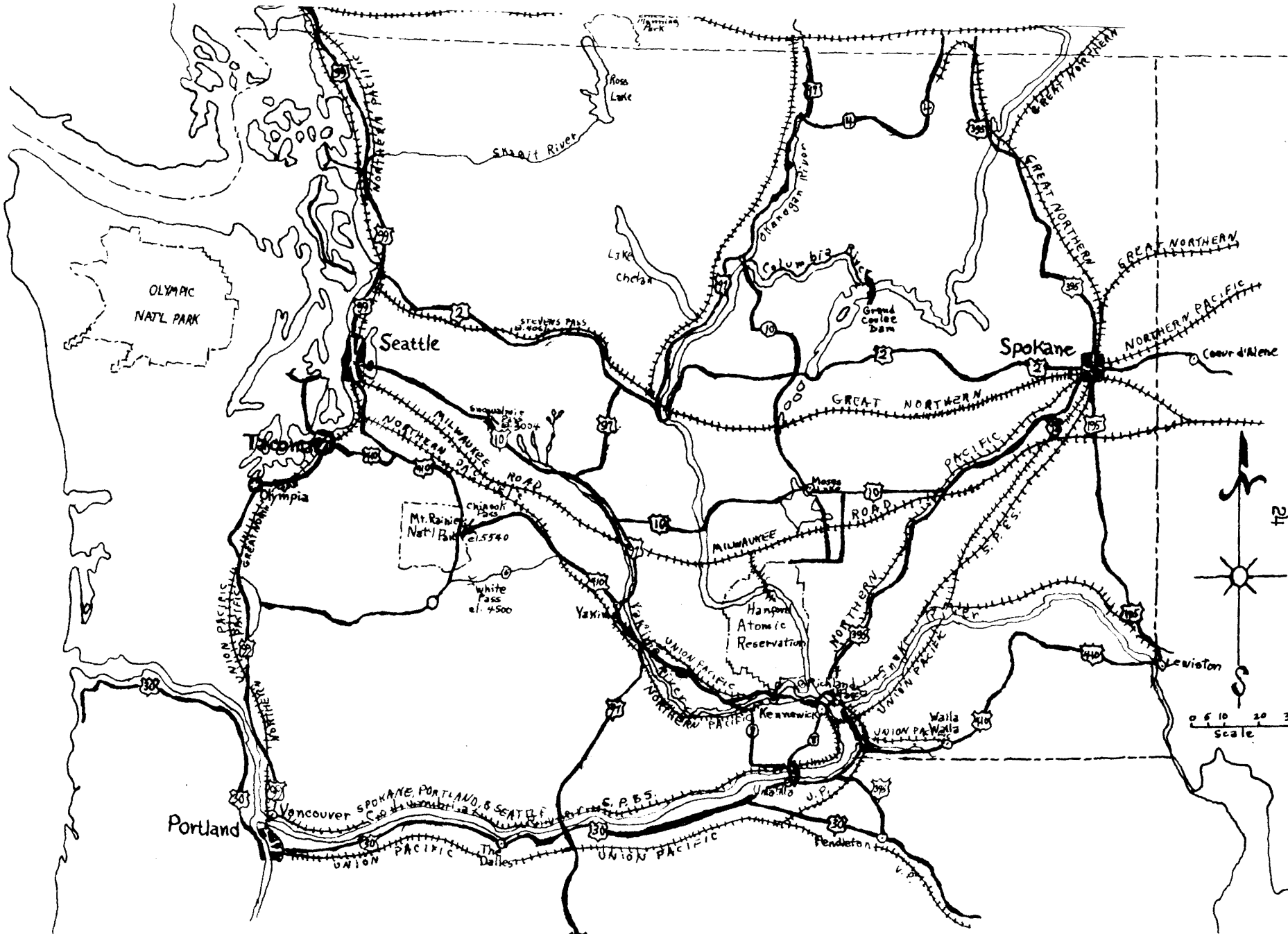


FIG. 9 **HIGHWAY AND RAILWAY TRANSPORTATION**

Fig. 10. Air view of the mouth of the Snake River. This photograph, taken on Labor Day, 1948, shows a large crowd of people enjoying the facilities of Sacajawea State Park. The site of Ainsworth was on the park side of the river, near the lower bridge.

town showed no plan, since all the business houses, most of which were saloons, were strung in a line along the river. Behind them were scattered homes, a church, a dance hall, and a little schoolhouse.

Building a bridge in an area where nature has not provided the raw materials requires a great expense. After two years of construction on this $1,300,000 bridge, the waterway had been crossed. But now it couldn't be used. While the engineers had followed the path of least resistance to construction, this plan had invited company. The U. S. Congress forced a proposed railroad, the Portland, Salt Lake, and South Pass Railway to share traffic along the wider flood plain on the south side of the Columbia River. This meant great free land losses for the Northern Pacific Railroad, and the sale of free land was to be the economic backbone for the company until a trade volume was built up. So plans were made to build along the north side of the Columbia and bridge the Columbia River. However, the construction of a roadbed on this rugged terrain on the north side (Figure 3) required many short tunnels and the removal of much rock. Meanwhile, as a result of failures at the Ainsworth Bridge and consequent lack of trust by its backers, the Northern Pacific Railroad filed bankruptcy and its holdings were taken over by the Northern Pacific Railway Company.

The principal engineer for the new company, Virgil G. Bogue, who achieved fame by engineering the famous mountain Oroya Railway

in Peru, scouted in the Cascades until he found Stampede Pass, and recommended the construction of the Stampede Tunnel.

Pasco Junction

It is always more economical to avoid moving construction materials upstream. So the ferry from Ainsworth was discontinued, and a new spur trach was taken off the main line where it rounded Coyote Hills and went to a new ferry landing directly on the Columbia River. The steamer, Frederick Billings, pushed the twelve-car load across the water barrier, delivering materials for the bridge and for the new rail line up the Yakima River Valley.

On March 18, 1885, the Railroad placed the important buildings of Ainsworth on flat cars and moved them inland two and one-half miles to the new spur junction known as Pasco junction. (Figure 11). The giving of the name Pasco is attributed to Mr. Bogue. The dust-laden air here reminded him of a Peruvian city, Cerro del Pasco. (Hill of the Field). Crews of construction workers established their residence near the railroad buildings, and Pasco had its beginning.

So far, then, in two instances we have seen that when a railroad meets the obstacle of rivers, bridging is necessary and town sites are developed. And they continue only as long as they meet the needs of man.

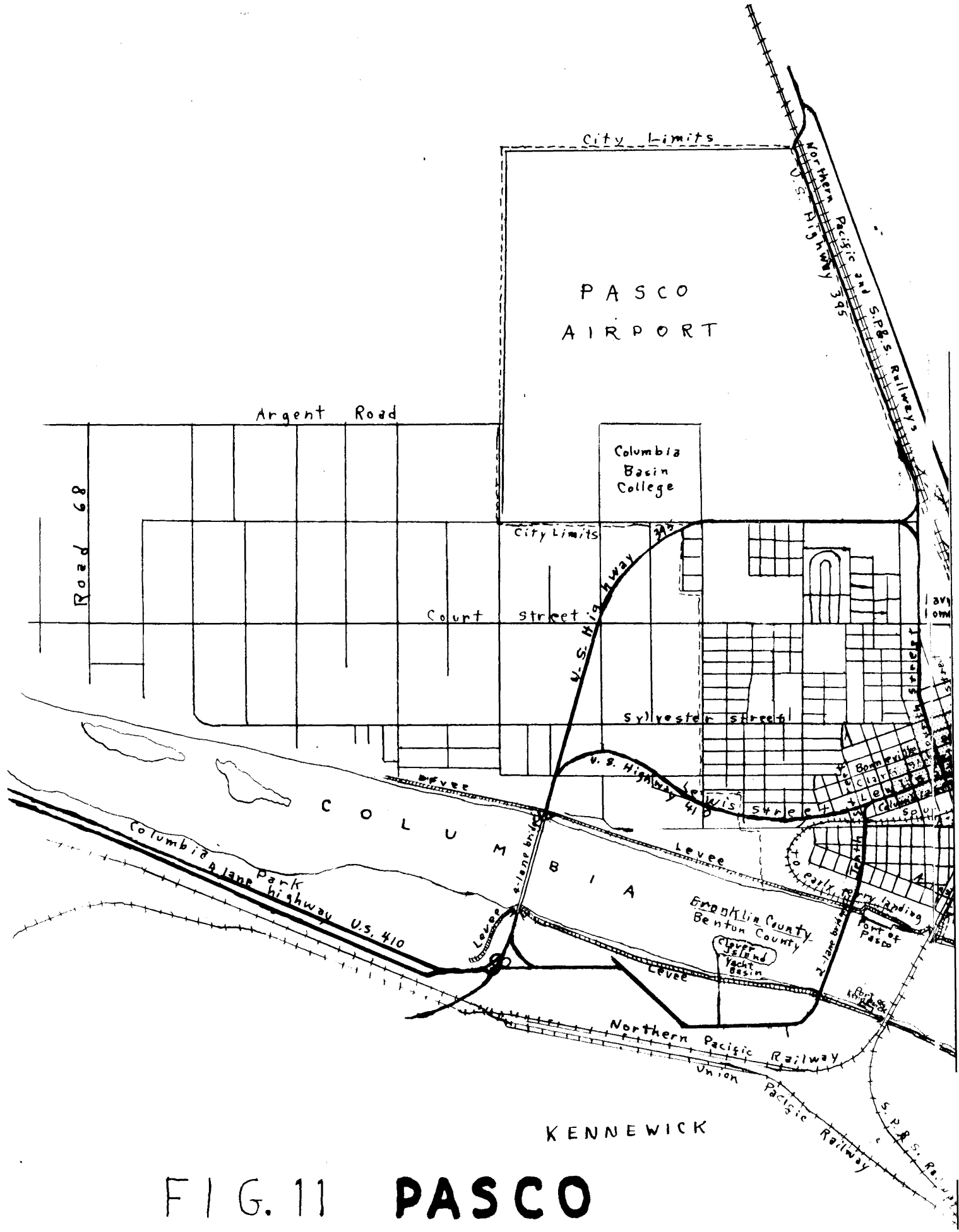
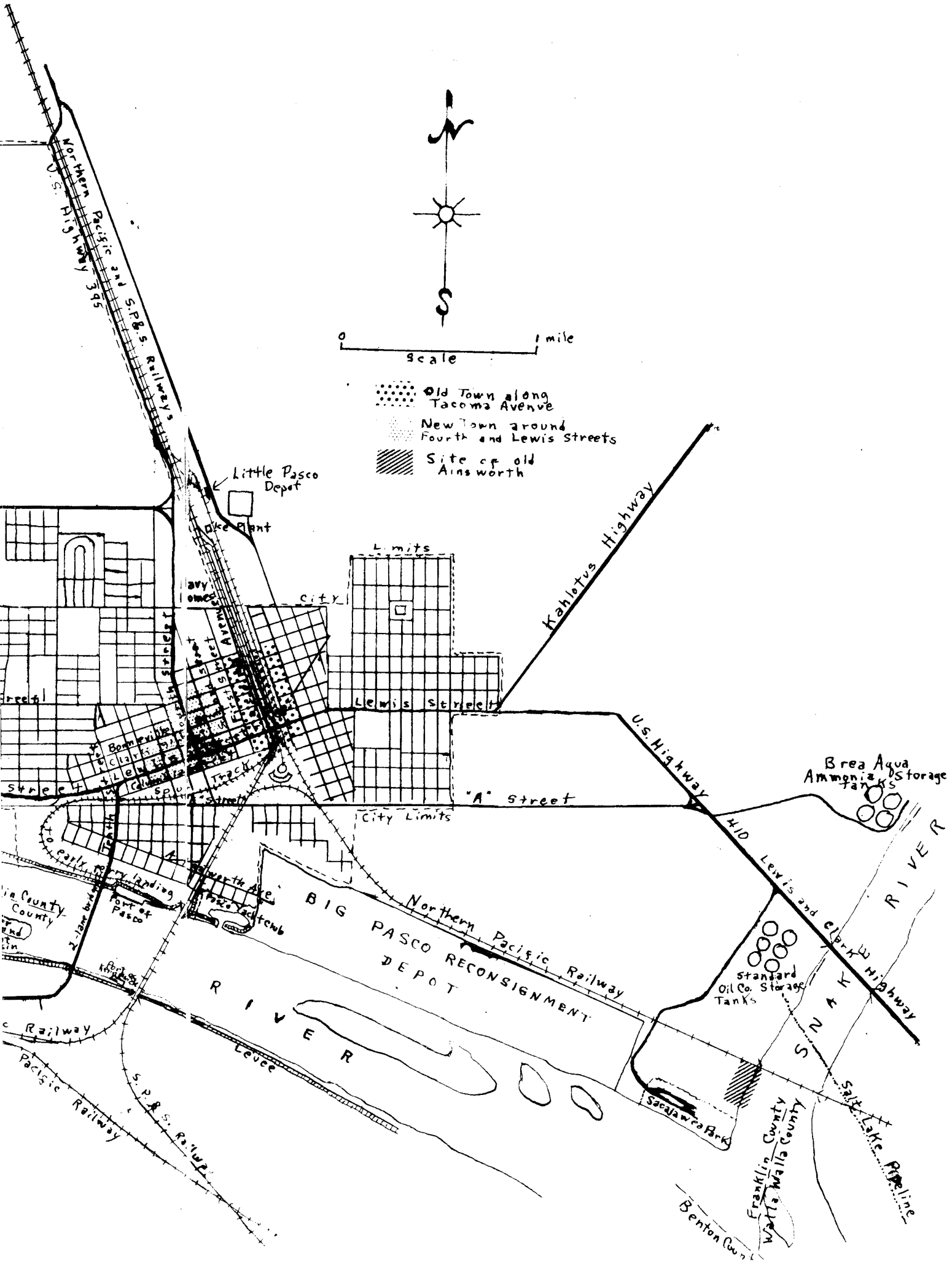

City Limits
PASCO
AIRPORT
Argent Road
Road 68
Columbia
Basin
College
City Limits
U.S. Highway 395
Northern Pacific and S.P.&S. Railways
Court street
Sylvester street
U.S. Highway 395
U.S. Highway 410
Levee
2-lane bridge
COLUMBIA
Columbia park
4-lane highway U.S. 410
Levee
Levee
Franklin County
Benton County
Clover Island
Yacht Basin
Levee
2-lane bridge
Port of Pasco
Northern Pacific Railway
Union Pacific Railway
KENNEWICK

FIG. 11 **PASCO**


Northern Pacific and S.P.&S. Railways
U.S. Highway 395
Little Pasco Depot
Lake Plant
Limits
City
Kahlotus Highway
Lewis Street
U.S. Highway
"A" Street
City Limits
Brea Aqua Storage
Ammonia Tanks
410 Lewis and Clark Highway
Northern Pacific Railway
BIG PASCO RECONSIGNMENT DEPOT
Levee
RIVER
SNAKE RIVER
Standard Oil Co. Storage Tanks
Port of Pasco
Sacajawea Park
Salt Lake Pipeline
Franklin County
Walla Walla County
Benton County
S.P.&S. Railway
Pacific Railway
0
1 mile
Scale
Old Town along Tacoma Avenue
New Town around Fourth and Lewis Streets
Site of old Ainsworth

Early Pasco Along Tacoma Avenue

Tacoma Avenue runs on the west side and parallel with the railroad tracks. (Figure 11). During the first few years, Pasco served mainly as a railroad construction town. Consequently, nearness to the railroad was the important factor in building construction, since it was the center of activity. The N.P.R.R. Company was the first to erect buildings; a one-stall roundhouse or engine house, an ice house, a depot, a freight house, a stock yard, and a water tank with well and pump house, piping, etc. At this time, and especially after the first through trains to Tacoma were operated, July 2, 1887, Pasco began to grow. "Among businesses, were a small drug store, the old Ainsworth Post Office, A. P. Gray's General Store (Figure 12), Sing's Chinese Restaurant, interspersing the twenty-two saloons. A Methodist church was built in the 1880's, now used by the Assembly of God congregation. The church, (Figure 13) located on Bonneville Street, seemed a long distance from 'town'."[7]

Beginnings and Growth of Other Sections

Since it had most to gain by Pasco's growth, the Northern Pacific Railway Company was the greatest human factor in the development of the city. The company owned the first square mile of land that was platted into lots and developed into a city, incorporated August 11, 1899. The railroad promoted agriculture and shipped

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[7]Elizabeth Obrien, Pasco, from Sagebrush to Atoms, 1949.

Fig. 12. The A.P.Gray General Store. This was one of the first retail stores in Pasco.

MAY 1959

Fig. 13. The first church in Pasco. It was used as a meeting place for all social functions.

out the first car of wheat in 1902. It was the major revenue source for Inland Telephone and Telegraph Company. It built Red Row, twenty-seven 2-story frame houses in 1905. (Figure 14). These houses, used for railroad office personnel, were the largest housing project up to this time. By 1905, also, the railroad had constructed a small hospital, one of the first between Seattle and Spokane. The railroad, then, was almost entirely responsible for the growth of the city to a population of about 2,500 by 1910.

The Northern Pacific also was responsible for another great construction crew influx. Due to an agreement for mutual use of existing railway facilities, the construction of the Spokane, Portland, and Seattle Railway was begun in 1908. This company is connected with the transcontinental Great Northern Railway. It is also known as the North Bank Railway, since it took over the route which the Northern Pacific had once undertaken to construct before it changed its mind and went to the Sound via North Yakima and the Stampede Tunnel. Even though the dust blew continuously for twenty-eight days in March, 1908, the citizens of Pasco were not like those who settled here after 1943. They were excited about the rapid development of their city. During this time, the city center moved westward toward the present heart of the town. (Figure 11). The A. P. Gray building, the Pasco Hotel (Figure 15), and others were built up around Fourth and Lewis, the present downtown section. According to

MAY 1959

Fig. 14. Red Row. These twenty-seven two-story houses were built by the Northern Pacific in 1905. The houses were purchased by Warden L. Fann in 1941, who sold them to their occupants and others.

Fig. 15. The New Town area in 1915. The Pasco Hotel, the three-story building in the center, is now the site of Payless Drug Company. The building across the street left now houses Carl's Apparel. The alfalfa field in the foreground was a part of the block set aside by the Northern Pacific for the public school.

Adolph Neuman,[8] the business area was divided between Old Town and New Town, with a No-man's Land in between. The Old Town business men, who located between First Avenue and Tacoma Street and east of the track, didn't think that New Town, between Third and Fourth Avenues would ever amount to anything. Because of the rivalry, nobody built any stores between Second and Third Avenues. Human factors though they were, they dictated the pattern for development at this time.

With two railroads serving the area, Pasco became more firmly established as the transportation center for this part of the Northwest. With a population influx, many improvements were brought about due to an increased economy. A panoramic view of Pasco in 1910 (Figure 16) shows much of the town which was built due to railroad influence and capital.

The cultural needs of a city was also one factor which dictated the pattern of its development. The Pasco Carnegie Library, (Figure 17) the Cord Theater, (Figure 18) and the Franklin County Courthouse (Figure 19) are examples of these cultural developments.

The gradual growth of Pasco up to World War II is directly connected with the gradual growth of the railroads which served this city. In 1913, a 38-stall roundhouse and steam locomotive

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[8] Interview with Adolph Neuman, April 24, 1959.

Fig. 16. A Panoramic View of Pasco in 1910. The Northern Pacific Railway Company gave impetus to practically all development. This photo was taken looking west from the top of the old coal bunker. At the extreme left can be seen the A Street Red Row houses built by the Northern Pacific.

Fig. 17. The Pasco Carnegie Library. In 1910, a $10,000 endowment was received from Andrew Carnegie.

Fig. 18. The Cord Theater. This same building today is the Liberty Theater with a remodeled front. On the silent movie screen on this day in 1914 was the heart-tugging drama, "The Woman He Wronged." And as an added attraction, according to the billing out front, was the "Seven Jubilee Singers."

Fig. 19. The Franklin County Courthouse. Built in 1912, this building is now surrounded by other developments and businesses.

repair shop (Figure 20) were erected. The transfer of ownership from the Addison Miller Ice Company to the Northern Pacific (Figure 21) was a marked expansion. Since Pasco is located near the large fruit-growing region acros the Columbia River and up the Yakima Valley, the icing of railroad cars has continued to be an important industry since before World War I. Until World War II, the railroads, together with connected industries, have always had the largest payroll in the city.

With this economic stability, the optimistic citizenry outdid themselves in some instances in the installation of modern city improvements - sidewalks, paved streets, lights, sewers, a new city hall.

The advent of automobile and truck transportation, though they competed with the railroads, was another factor in the development of Pasco, as well as all of the Tri-City area. Bridge construction crews again made their headquarters in Pasco, adding to its economy. The first bridge to be completed was across the Snake River on the Lewis and Clark Highway. (Figure 22). This bridge provided a faster and more economical access to the Walla Walla area, and to Portland on U. S. Highway 30. (Figure 9). Remains of this first highway (Figure 23) can still be seen at the new bridge. The first bridge was dedicated in 1921. One year later, in October of 1922, the bridge between Pasco and Kennewick across the Columbia River was completed. Bridging of the rivers has resulted in the establishment of offices and

MAY 1959

Fig. 20. The Pasco Roundhouse and Repair Shop. When this photograph was taken, it was just beginning to be torn down. A roundhouse and repair shop for diesel engines is planned.

MAY 1959

Fig. 21. The Northern Pacific Ice Company Building. This important industry has provided work for more than 100 Pasco residents.

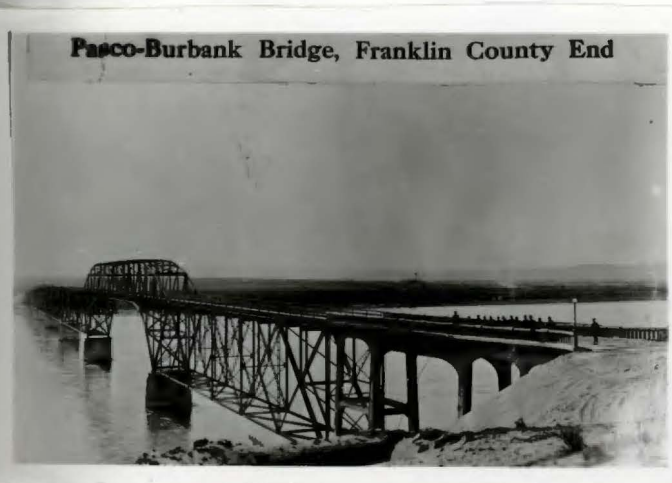

Fig. 22. The First Snake River Highway Bridge. It was a steel bridge with a wooden deck. One windy night, a fire began in the wood and destroyed the bridge. The State Highway Department put in a pontoon bridge, but it was soon destroyed by ice.

MAY 1959

Fig. 23. The New Snake River Bridge. Remnants of the old highway are in the foreground.

warehouses for eight trans-continental truck lines in Pasco and Kennewick, hauling construction materials and crops from a continuously developing hinterland. It has made possible a connecting link for trans-continental bus transportation services; was a factor in the development of inter-city bus service; and promoted the Twin-City name for several business establishments, which shows a feeling of oneness between the cities of Pasco and Kennewick.

An aerial photo, taken in 1943, (Figure 24) shows that the street leading to the Columbia River Bridge, Tenth Street, (Figure 11) was the extent of the westward development of Pasco up to this time. Why is this street now in the approximate center of the city? What were the factors which led to such rapid development? The federal government installations give us the key to understanding.

The Big Population Invasion

When the United States declared war in December of 1941, the 84th and 89th Quartermaster Corps were stationed in Pasco to protect valuable railroad property and the small storage depot called Little Pasco. (Figure 25). But the U. S. Army was looking for a site to erect a larger supply depot. It needed to be inland for protection from a bombing attack, and yet it needed to be an ocean port. Pasco met these qualifications. A 711-acre site on

Fig. 24. Aerial photo of Pasco in 1943. This photo, looking west, was taken from a Navy plane in 1943. The railway yards are in the foreground. The far edge of the clump of trees is Tenth Street.

Fig. 25. Remains of the Little Pasco Depot.

the river flood plain of the Pasco waterfront was chosen and building on Big Pasco began in the spring of 1942. This was later known as Pasco Holding and Reconsignment Depot. From these eight warehouses, (Figure 26a) considered the largest in the nation, materials were dispatched to Allied Nations under the Lend Lease Plan of the U. S. Great numbers of narrow gauge engines, guns, and tanks were shipped from this point to the U.S.S.R. Since June, 1955, when Big Pasco was decommissioned, the Pasco Port District has made numerous attempts to purchase this property for industrial development, but a satisfactory price agreement has not yet been reached.

Almost simultaneously with the building of Big Pasco, the U.S. Navy confiscated an area of sandy wasteland north of the airport. Recognizing this area as especially suitable for uniform flying weather, the Pasco Naval Air Base was constructed at an approximate cost of $9,000,000. The 4,000 cadets nearly doubled Pasco's population. In July, 1946, the base received its inactivated standing, and shortly thereafter was deeded to the city of Pasco for $1.00 - a gift of the U.S. Government. The two-story barracks and the base hospital were moved by ferry across the Columbia River to North Richland. But the other buildings added much to Pasco's industrial development. The gigantic swimming pool, (Figure 26b) largest indoor pool in Washington, is now privately owned. Tri-City Mattress Company,

DEC 1958

Fig. 26a. The Big Pasco Warehouses. Included in this property are the eight warehouses, each of which can house 700 cars of freight; thirty miles of railroad; twenty-two miles of paved road; 41,956 feet of water pipe for fire protection; fuel oil storage for 117,000 gallons; and forty-two big hot-air furnaces.

MAY 1959

Fig. 26b. A part of the Pasco Naval Air Station.

Jackson Potato Chip Factory, and other light industries located here. Buildings for Columbia Basin College were available. And the warehouses have been used as central distributing points for several nationally-known wholesale companies.

Hanford Works, largest of all man-made factors in the development of the Tri-Cities, also had a tremendous impact on Pasco's development. When 55,000 people suddenly were brought to live in a desert area where only 100 people have lived before, the surrounding communities were bound to be affected. For the first year of Hanford construction, the U.S. Army demanded office space and warehouse facilities in Pasco for DuPont and for Olympic Commissary, the food agency for the construction job. The A. P. Gray Building (Figure 27) served as part of this office space. When a huge population invaded an area which was built only for few, adaptations to the increase must occur. However, these changes were often not made as rapidly as desirable.

In January of 1943, the Federal Housing Administration agreed to construct 100 family units in the city. In August of that year, the units were available, with first preference to the DuPont employees and civilian employees on naval construction. The number of these units was increased annually until 1945. At this time, another project of 231 family units called Navy Homes (Figure 28) was built for servicemen, and later used by veterans. However, this construction, together with approximately

DEC 1958

Fig. 27. The A.P.Gray Building. This was one of the first buildings in New Town, on Fourth Street. It served as office space for the E. I. DuPont Company during Hanford construction.

MAY 1959

Fig. 28. A section of Navy Homes. These 231 family units were an emergency housing project.

200 family units built privately between 1945 and 1948 did not fulfill the needs. "Rent for sheds, basements, porches, garages, and single rooms rose from $10 to $80. Real estate prices on homes rose from $3,000 to $10,000 in one year."[9]

Transportation facilities were overtaxed with the flood of people. The Northern Pacific and S.P. & S. Railways doubled their passenger depot capacity in May, 1944. (Figure 29). the bus depot also doubled its size in 1945. Despite this, naval authorities complained of the filth and crowded conditions at these places.

Because of the large influx of population brought in by the construction of the Hanford Atomic Plant and the town of Richland, the Pasco community also had to expand its facilities for schools, churches, bakeries and restaurants, supermarkets, municipal swimming pool, health and sanitation services, and more adequate highway transportation facilities. It is difficult to realize the tremendous impact the population invasion had on the development of Pasco. The 1940 census showed the population as 3,913. In 1950, the census showed an increase to 10,228. (Figure 8).

Elizabeth Obrien, in her paper entitled, Pasco, From Sagebrush to Atoms, includes a free verse poem, written by a artime resident of Pasco who worked in a restaurant named Pasco Lunch. Although many of the criticisms are exaggerated,

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[9]Obrien, loc. cit., p. 34.

MAY 1959

Fig. 29. Northern Pacific and Seattle, Portland and Spokane Railway Depot. The one-story section was added in 1944.

and may describe Tacoma Avenue at almost any point in history, it does show what happens to a town which almost overnight is transformed from a self-satisfied life based upon small business and a railroad intc a wartime center.

"Landscape: Pasco, Washington"

Pasco -- Main Street -- Sewer for Hanford, Hanford Washington, greatest war project, construction etc. in the U.S. Now municipal street cleaning department. Dirty streets; drunks; ragged, barefoot children -- winter, winos, bums. Winos, men drunk 24 hours a day on fortified wine every day all reeling. Gamblers run the town, bums obscure it. Cars, businesses, dentists, restaurants, beer halls -- $26,000 this year, $200 last year. Sputum and vomit and blook thick over the sidewalk. Wind blowing dust from sagebrush desert without cessation. Streets, windows dirty - filthy. Great Columbia River off Main Street and parallel, rear -- high, black and fabulous. Navy planes of Pasco Navy Base drowning the air. Cars. Cars. Little Pasco Depot. Arm bands, DuPont, on men at depot say anybody with suitcase, grab you, say "Are you for DuPont? Are you for Olympic Commissary?" hustle you off... men out the South swamp... illiterates... hillbillies... poor white trash... for DuPont, for Olympic... for Hanford. Herd them...Herd them... into Pasco Lunch, by the depot, with niggers for breakfast: used to give them 75¢ breakfast. Couldn't get them out. They went to sleep. Legs on tables, wouldn't budge: Most of them foodless, moneyless, made the trip across the U.S. to Pasco on a promise. On $5 and a promise of Paradise - to doom at Hanford. Get them out of Pasco Lunch; now giving them only coffee and doughnuts. Get them out... 35,000 Mexicans coming in. Day and night, 50,000 beings in 5 square miles at Hanford. DuPont war project. Crowd them in. Pasco, coming by train. Day and night. Knife in back. Pasco jail full -- emptied steadily -- cause too big a feeding problem. Winos borrowing dollars - living well. Death. Crime. Squalor. Pasco Main Street: sewer of Hanford, greatest war project in the U.S.

Pasco Irrigation Developments

Irrigation in the Pasco area dates back to 1910 when the Franklin County Irrigation District was formed. Steam pumps were used to pump water from both the Snake and Columbia Rivers into the ditches and diversion canals. The use of irrigation water made possible the use of what had been considered waste land. Fruit, especially strawberries, (Figure 30), apples, peaches, and grapes became important. These fruits from the Tri-City area were shipped by rail and truck facilities to Seattle, Spokane, Portland, and in some cases, as far east as Chicago.

With Franklin Roosevelt's election, new irrigation hopes arose in Pasco. His views of Columbia River development were well known. Pasco was one of the most active small communities in promoting the final passage of the Coulee Dam Act. Pasco joined in giving active support and financial aid to send lobbyists to Congress. World War II, however, interrupted progress in Columbia Basin development.

In 1949, before the water from the Coulee Project was ready to flow, the Pasco Pumping Unit was the first section to be irrigated in the Columbia Basin Project. The Northern Pacific Railway made all its land available for settlement as soon as water for the unit was assured. Preference in sales was given to qualified veterans. The Railway owned all or part of the thirty-four farm units within the first project section.

Fig. 30. H.V.Wexler's 40 acre strawberry field. This photograph, taken in 1922, shows the pickers in the hot sun, harvesting along the upper river road. When it came to be strawberry picking time, the Indians from Yakima would come to work in the field, pitching their tepees along the bank of the Columbia River.

Approximately 70,000 acres have been developed annually as the government made funds available. The results of what a farmer could do when water was delivered to the arid, sandy, soil of the 5,500 acre Pasco Pumping Unit has overshot reclamation bureau predictions by more than ten years.

The 220,000 square miles of the Columbia Basin territory north of Pasco is 7% of the area of the United Stated. The estimated cost of orderly development of this land for farming was about $5½ billion, but rising inflationary costs have brought the estimates well over $6 billion. Pasco has already been developed as one of the most important outlets for the irrigated crops of sugar beets, hay, beans, and grain. Under normal conditions, continued development will be needed for the growing population of the United States and the world.

Pasco as an Ocean Port

The Port of Pasco, an active river shipping facility since 1941, has been gaining momentum. As the Columbea Basin land has been developed its position as an inland port has become increasingly important. The volume of barge shipment has been on a rapid increase because of navigation developments. The volume of goods shipped from Tri-City ports in 1958 was more than twice the tonnage shipped in 1957. One reason why Pasco is a natural outlet for farm products is that all of the Columbia

Basin is uphill from Pasco. The most economical way to move goods to market is downhill. The Tri-Cities are the hub of rail, highway, air, and river transportation. Port District managers show that more retail outlets in more states can be serviced in less time from the Tri-Cities than from any other area in the Pacific Northwest. The weather in this area permits uninterrupted transportation conditions at all times of the year.

The port of Pasco (Figure 31) already is the largest Columbia River port above Vancouver, Washington. Wheat and petroleum products are shipped downstream. Anhydrous ammonia, Portland cement, automobiles, and heavy farm machinery are received at this port. In 1954, the Salt Lake Pipeline Company built huge storage tanks (Figure 32) along the Snake River east of Pasco. The 700-mile pipeline feeds directly into the storage tanks from oil fields in New Mexico. This factor has made Pasco a major petroleum distribution center for all of this part of the Northwest. During the same year, Brea Aqua Ammonia Company also built tanks with a 630,000 gallon capacity along the Snake River. From this point trucks carry the agricultural fertilizer into the Columbia Basin, and surrounding agricultural area.

Construction on John Day Dam, downstream from McNary Dam, has already begun. This dam is the last link in providing slack water from the Tri-Cities to the Pacific Ocean. Seaport

MAY 1959

Fig. 31. The Port of Pasco. This photo was taken from the old highway bridge across the Columbia River.

MAY 1959

Fig. 32. The Standard Oil Company storage tanks. The oil pipe line feeds directly into these tanks.

freight rates have already been promised to be equal with Portland, Oregon. However, ocean ships will never be seen in the Tri-Cities as they are seen at Portland. Most liberty ships draw at least twenty-eight feet of water. The cell depths on the locks on the Columbia River dams will only allow ships which draw a maximum of sixteen feet of water. According to engineers, higher dams are not feasible. Ocean-going barges of 7,500 tons, having equal capacity with liberty ships, have already docked at Tri-City ports, and 10,000 to 12,000 ton barges will be available after the completion of John Day Dam. The big ships may not be most important. Slack water will permit lower-powered tugs to bring up multiple tows, and will greatly reduce freight costs. For instance, at this time because of prohibitive rates, limestone, timber residue pulpwood, and low grade iron and aluminum ore cannot be shipped to the Tri-Cities. When this is possible, industries using these products may be developed. The continuous slack water to the ocean will link this area by direct barge service with Alaska, Pacific Coast ports, and via the Panama Canal, with the Gulf of Mexico, and Mississippi River ports. Then, via the Inland Waterway, with the Eastern Seaboard.

Also, the building of four proposed multi-purpose dams on the Snake River will make possible slack water navigation to Lewiston, Idaho, and would tap the great timber and mineral areas of the central Idaho panhandle.

Pasco as the Air Terminal of the Tri-Cities

In 1926, the first contract airmail in the United States was flown from Pasco. Because of its location, post offices throughout the state signed petitions making Pasco the hub of airmail service to points in Washington. This service was interrupted while the Navy Air Base was situated in Pasco, but since 1946, the use of the airport has been expanded.

"West Coast Airlines, with operational headquarters in Pasco, has seen its flight schedule double and its passenger total nearly quadruple, while private flying has also climbed to new heights. West Coast Manager, Charles Pudwill, put it this way: 'As the Tri-Cities grows, so will airline service.' In 1949 Empire Airlines began daily flights from the old Pasco Navy Airport. In 1952, West Coast merged with Empire, upping the flight schedule to four a day. Currently, West Coast has nine flights a day and eight of these are on the streamlined F-27's which cruise at speeds of 245 miles per hour, cutting considerable time off flights.

The Pasco airport covers 2,200 acres and is rapidly developing into a first class station. In 1958, a $50,000 lighting system was installed on the two main runways, plus $45,000 for resurfacing.

Additional plans call for the building of a new terminal building, resurfacing of runways and taxi strips, aprons, and

utilities."[10] Since Pasco is at location which is the hub of transportation in this part of the state, air transportation to Seattle, Portland, Spokane, and points east has become increasingly important. Pasco has the only major commercial airport in the Tri-Cities. Government personnel and connected industry have greatly contributed to this increase.

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[10] Tri-City Herald, (Pasco, Kennewick, Richland, Wash.), March 15, 1959.

CHAPTER IV

KENNEWICK, THE FRUIT, DORMITORY, AND CHEMICAL CITY

Early Beginnings and Failures

When a river is an obstacle to the flow of land traffic in one direction, it is true also in the return direction. Prior to the completion of the first railroad bridge across the Columbia River, trains were transferred across the river by ferry. This was more expensive and took more time than bridge traffic would take. So, like Pasco, Kennewick had its beginning as a railroad terminal, on the other side of the river. (Figure 33). After scouting on the river, H. S. Huson, civil engineer assigned to the bridge project, decided to use the site near present day Clover Island as the bridge site. The Hudson Bay Company had used this site as a landing place when they hauled hay from this area to Fort Wallula. This site would easily permit the landing of construction materials for the railroad camp as well as for the bridge.

The chosen site for the construction camp on the Kennewick side of the river was near the present day Duffy's Auto Camp. (Figure 34). It consisted of hutments for workers on one side of the railroad track, and a six-stall roundhouse, turn table, coal bunkers, and stock yards on the other side.

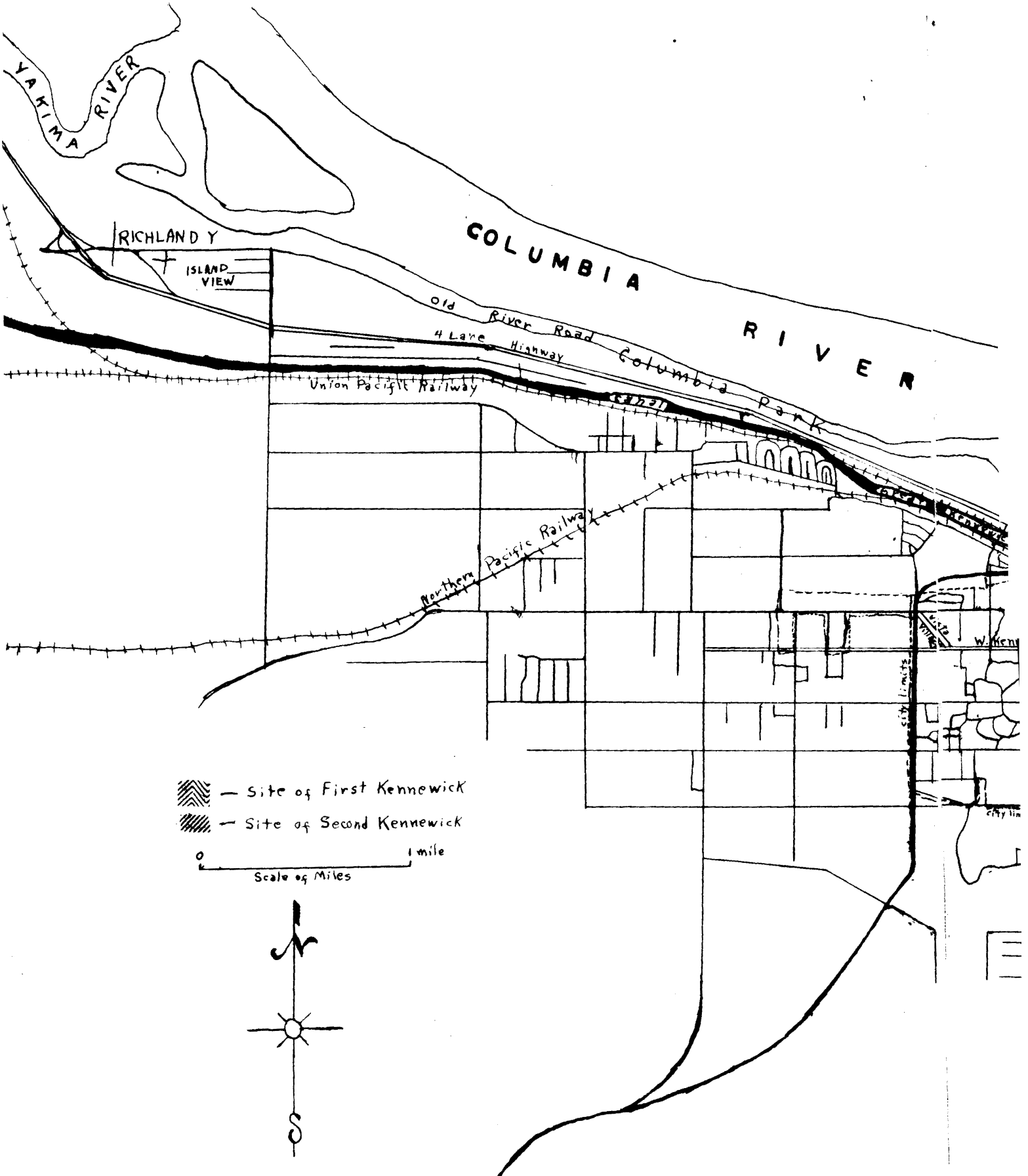
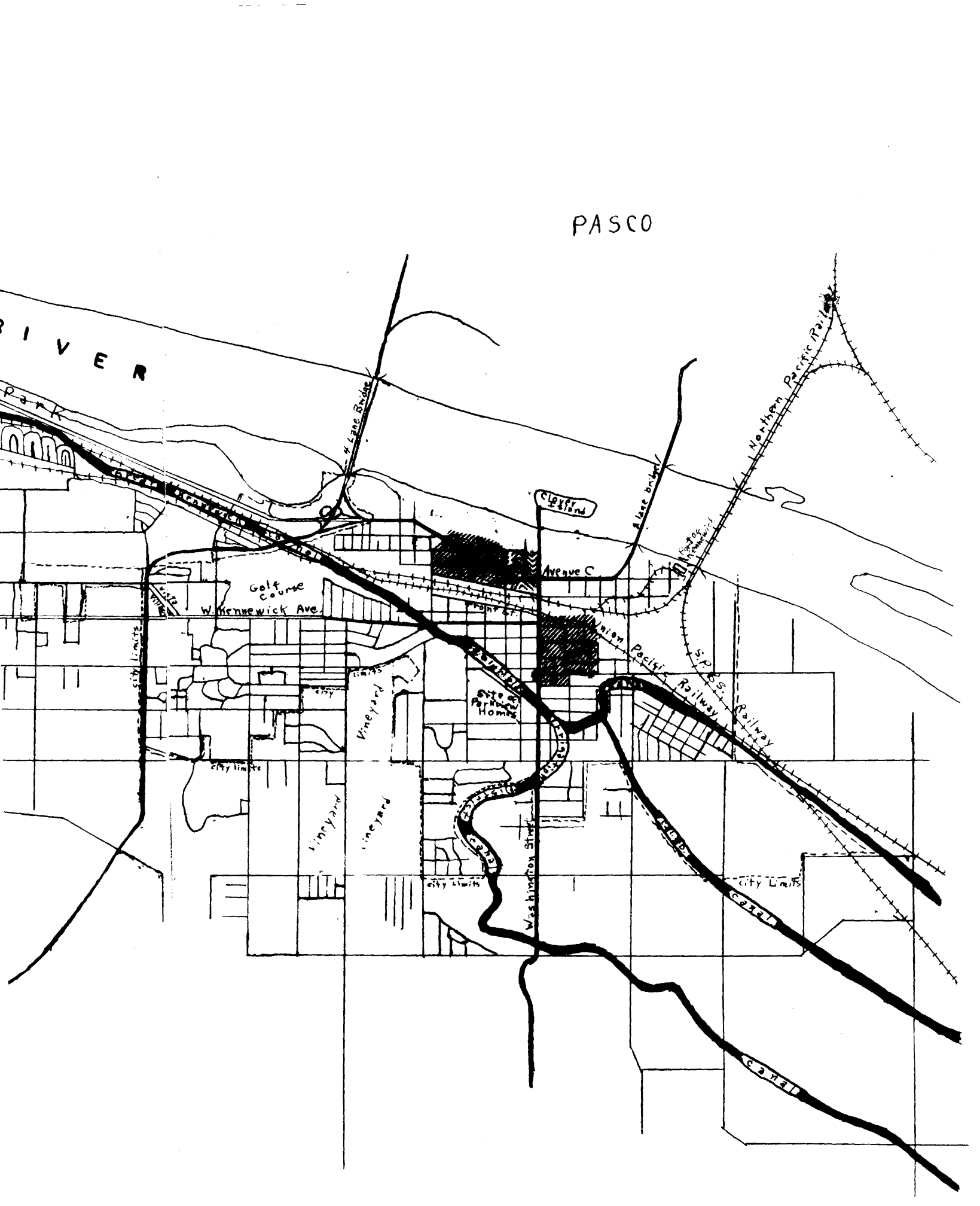


FIG.33 **KENNEWICK**


PASCO
RIVER
Park
4 Lane Bridge
Clapp Ave
4 lane bridge
Northern Pacific Railway
Avenue C
Golf Course
W. Kennewick Ave
Main St.
Union Pacific Railway
S.P.&S. Railway
city limits
Vineyard
Vineyard
Vineyard
Washington St.
canal
canal
canal
canal
City Limits
city limits

MAY 1959

Fig. 34. Duffy's Auto Camp, site of the First Kennewick.

When the first train crossed the bridge (Figure 35) on December 8, 1888, the Northern Pacific Railway had conquered all physical barriers from Ashland on Lake Superior to Tacoma on Puget Sound. The bridge now made possible the faster flow of people and materials for the settlement of the Yakima Valley and of Kennewick. But there was no reason why the first Kennewick should continue. Without irrigation, the semi-arid desert region of Kennewick offered no incentive for continued population. The larger railroad facilities in Pasco were now easily accessible. So, in 1889, the first Kennewick failed. "The old town of Kennewick has met the fate of her sister, Ainsworth, and has been dismantled. The timbers used in building both deceased towns have been brought and used in the construction of dwellings on the outskirts of Pasco."[11]

When water was brought to an area where the topography permitted irrigation, the volcanic soil of this desert region produced abundantly. Recognizing this fact, a private company, the Yakima Irrigation and Improvement Company was organized in 1892. Not only were the Columbia and Snake Rivers available for a water supply, but the Yakima River was scouted for possibilities. This river (Figure 3), in cutting between the Horse Heaven Hills and Rattlesnake Hills forms a rapids about twenty miles from Kennewick. The company, after preliminary surveys, began to construct a gravity-flow ditch from this point, Horn Rapids, on the Yakima River.

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[11] Portland Morning Oregonian (Portland, Oreg.), April 9, 1889.

Fig. 35. The first Northern Pacific Railway Bridge across the Columbia River. The construction of this bridge was the major factor in the location and establishment of Pasco and Kennewick. Notice the sternwheel steamer on the Columbia River.

A construction crew was needed, so to house them, the Y.I. and I. Company constructed a three-story frame hotel in 1893. (Figures 36 and 37). In order to keep the crew happy, the $17,000 building was equipped with modern plumbing and running water, by means of a water tank on the roof. Around this hotel, other buildings were constructed to serve the homeseekers and investors - the residents of Second Kennewick, and its surrounding areas. In 1893, the first newspaper ever published in Kennewick, The Columbian, spoke of flourishing farms and orchards, the first strawberries put on the market of the coast cities, and a population of about 400. One investor, C. J. Beach, platted a townsite on the south side of the railroad tracks and built another hotel on the site of the present Union Pacific Depot. A drug store, blacksmith shop, and a few other buildings comprised that portion of Kennewick.

Although the name, Kennewick, meant winter paradise for the Indians, residents of Second Kennewick did not see such bliss in this area. One factor to discourage many from remaining here, was that the Columbia River flood of 1894, the largest flood on record, destroyed much of their property. In 1895, the world panic reached Kennewick, and development ceased. Since irrigation gave the impetus for development, Kennewick's development has always depended for a large part on the surrounding agricultural area. Although crops were successfully grown, the market for the fruit and vegetables grown was so poor that

Fig. 36. The Y. I. & I. Co. Hotel. This 69-room building was nicknamed the White Elephant because it was seldom used. It burned from a gaslight explosion in 1904.

MAY 1959

Fig. 37. The site of the Y. I. & I. Co. Hotel as it looks today.

farmers had difficulty in paying for their water rights and their land. The ranchers south of Kennewick at this time were primarily engaged in rounding up the thousands of wild horses and shipping them by rail to points east. A poor market also discouraged this business. Since the Yakima Irrigation and Improvement Company was not yet solvent, and fees from the farmers could not be collected, the company had difficulty in maintaining the canal. Rodents dug small holes in the canal banks, which turned into larger breaks. On September 26, 1896, a large portion of the sandy, earthen canal bank washed out, and irrigation was discontinued. Without irrigation, there was no purpose for a city, so the Second Kennewick failed.

Although Kennewick and Pasco had similar beginnings as railroad terminal points, why did Kennewick have two failures while Pasco, during this same time, seemed to make steady progress in its development? They were both on the same rail line, and both had energetic citizens. They both had distinct advantages. Pasco was more advantageously situated for river traffic on both the Snake and Columbia Rivers. Kennewick had more valley land suitable for irrigation. Why the difference in development? The Northern Pacific was more concerned with the development of Pasco. Without the capital of this large company, Pasco's development may have been like that of Kennewick. The Yakima Irrigation and Improvement Company, though it had

major plans for the development of the Kennewick valley area, lacked the capital to support those plans, and could not continue the upkeep of its project. And without irrigation, there was no reason for the continuance of Kennewick as a town.

Development Contributions of the Northern Pacific

In order to sell the vast tracts of right-of-way grant land, the Northern Pacific took over the inadequate canal and other holdings of the Yakima Irrigation and Improvement Company. "The Northern Pacific Irrigation Company was formed, and in February, 1902, began enlarging the Horn Rapids ditch. (Figures 38 and 39). When it was completed the following year it was thirty miles long, five feet deep, ten feet wide at the bottom, and eighteen feet wide on top."[12]

While the canal was being rebuilt, Kennewick again sprang into existence. Houses and business establishments went up rapidly. The business establishments were largely concentrated along Front Street. Signs of rapid building are still in evidence when one examines the outside walls of the first permanent blacksmith shop. (Figures 40 and 41). Sand and rocks of glacial till were scooped up right on the site, mixed with a little cement, and poured into the forms.

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[12] Tri-City Herald (Pasco, Kennewick, Richland, Wash.), March 30. 1958.

Fig. 38. The Kennewick Canal during its first decade. Without this Ditch of Life, there would have been no city.

Fig. 39. The Kennewick Canal today. Because of numerous drownings in recent years, it has been called the Ditch of Death.

Fig. 40. Front Street Commercial Area. The building at far left was the first permanent blacksmith shop.

Fig. 41. Identification marks of the blacksmith shop. The three horseshoes and the hitching ring in the sidewalk identify the site.

Since irrigation was now backed by the larger company, the Northern Pacific, merchants were confident that irrigation would be a success. During eight months of 1902, the commercial center became firmly established. There were three general stores one hardware and manufacturing tin shop, two hotels, one feed store, one barber shop, two lumber yards, one livery stable, one warehouse, and a weekly newspaper, the Columbia Courier. These were the needs of the population living in the community at this time.

Land Company Advertising

The Kennewick Association, consisting of the Kennewick Land Company and the Columbia Land Company, (not railroad, but privately owned companies) printed over 18,000 pamphlets in 1903, describing the town. According to former Mayor A. C. Amon,[13] every train leaving from Chicago and St. Paul had a Kennewick pamphlet on every seat in 1905, when he came west. Everyone coming to Kennewick to find work found it, with the help of the Kennewick Association. If no special job could be found, the land companies would hire the men to grub out sagebrush. "A Kennewick Land Company pamphlet in 1903 read like this: "KENNEWICK, THE CALIFORNIA OF THE NORTHWEST." Its promotional literature stressed these points:

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[13] Interview with A. C. Amon, May 15, 1959.

1. Kennewick lies in the center of a district comprising 14,000 acres of land now being put under the most modern and complete system of irrigation possible.

2. Its location gives it unsurpassed markets for its products, being midway between Spokane and Seattle on the line of the Northern Pacific Railway.

3. Kennewick lands are far cheaper than any similar lands for the reason that the Irrigation Company is closely allied with the Northern Pacific Railway, which is giving the public the benefit of any possible saving.

4. The climate is ideal. While only 365 feet above sea level, on the beautiful Columbia River, its proximity to the snow-clad Cascade Mountains makes it a land of sunshine with air pure and healthful.

5. The low altitude makes the winters very mild and gives the earliest growing season known in the entire Northwest.[14]

The advertising literature was, in essence, true. Since this was in an era before the Theodore Roosevelt administration which did much to break up railroad monopolies, the lands were sold cheaply in order to build up an area for railway business volume. The mention of frequent dust storms, however, was purposely omitted from the advertising literature. This was one factor which was a disappointment to some after their arrival in this area, since they expected perfect weather conditions.

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[14]Interview with Ralph Reed, April 14, 1959.

Developmental Effects of the Advertising

The advertising of the Kennewick Association brought more people to make their homes in this area. Consequently, more land was developed, and more business establishments were erected to serve the people. (Figure 42). By 1904, Kennewick was established in a great fruit-producing area and became known as the fruit city of the Columbia Valley.

The first city improvements after incorporation in 1904 were to level down sand dunes in the streets, build board sidewalks and plant many of the trees which are seen along Kennewick Avenue to-day. As the fruit industry increased, and the agricultural area expanded, so did the city. A noteworthy city improvement was the building of concrete sidewalks in 1912. According to Ralph Reed, Kennewick had more concrete sidewalks in 1912 than any Washington city east of Seattle.[15]

The Agricultural Area and Its Influences on Kennewick

Much of the wheat grown on the Horse Heaven plateau area has been, and continues to be shipped from Kennewick. This plateau region had a wheat acreage of 189,000 acres as early as 1909. Horse-drawn combines (Figure 43) were the only means of harvesting in those days. This was especially difficult since deep-well drills were unknown at that time, and all water for the animals had to be hauled from the valley. Most of the first farmers in this area came from the Midwest, and tried to farm

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[15] Ibid.

Fig. 42. Kennewick Avenue in 1904. This photograph, looking west, shows the commercial section shortly after the town was incorporated. Notice the board sidewalks.

Fig. 43. Harvesting wheat in the Horse Heaven Hills in 1914.

their Horse Heaven homesteads the same way they had done back there. The varieties of seed which they had were not adapted to this soil and climate. During some of the winters, there was little snow cover and their winter wheat winterkilled. Their mold-board plows went deep into the volcanic ash and most of the loose soil was eroded by wind. Many soon discovered that the only way to farm this land was to summer fallow it and sow only half of it to wheat each year. Because of poor farming methods and poor machinery for this type of farming, the yields were often under ten bushels per acre. Some farmers, with large acreages, stayed on their homesteads and learned new methods. But many were discouraged and left. By 1924, plantings had decreased to 65,000 acres.

When the optimum precipitation for wheat seems to be somewhere around thirty-two inches per year,[16] it is quite an achievement to produce excellent yields in this area of about ten inches per year. (Somewhat higher than valley precipitation). Since the wheat here had a longer growing season than most wheat regions, the wheat has always had a high protein content, and this commands a premium price, since it is a good bread wheat. High protein content increases the capacity of the flour to absorb moisture and yields a bread of fine texture with pore spaces of desired size.[17] When there has been enough precipitation

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[16] William Van Roven, The Agricultural Resources of the World (New York: Prentice Hall, Inc., 1954), p. 28.

[17] Ibid., p. 28.

in the fall, winter wheat has been sown. Deep drills (three to six inches) put the wheat kernels deep enough for moisture to make it sprout and grow. Although the new varieties of wheat permit more winter wheat to be grown, some spring wheat is still found. Winter wheat is preferred, however, because it fits well into the seasonal schedule of farm operation and reduces the possibility of damage from Hessian fly. When the U.S. Government began acreage allotments for wheat, farmers concentrated on the use of commercial fertilizers to a greater extent. During the last five years, yields over fifty bushels per acre have become common.

This wheat is now hauled to market terminals in bulk form. But, for many years, all wheat shipped from this area had to be sacked. Since bulk wheat sometimes became moldy when it was shipped through the humid, equatorial parts of the world, the port at Portland, Oregon, chief market for the wheat, required that all the wheat be sacked. When sacks were impossible to get during World War II, adaptations were made to ship the wheat in this form.

The port of Kennewick, wishing to promote the shipping of wheat from this city, built a wooden elevator (Figure 44) on its land. But it was wartime and materials were scarce. The rails for a railroad spur to the site had already been bought. But they were confiscated by the government and used at the

MAY 1959

Fig. 44. The Kennewick Grain Elevators. The elevator on the left was never used. The North Pacific Grain Growers Elevator is in the center. According to Ralph Reed, the trees in the center of this photograph, a part of the Ledbetter Ranch, were the only ones in this entire area in 1905. This shaded area was used as a Mexican farm labor camp in 1934, when asparagus cutters could find no housing.

Pasco Naval Air Station. Because of faulty construction, the building was never used. In 1952, the North Pacific Grain Growers Inc. erected an elevator with a capacity of four and one-half million bushels. This is the largest grain elevator on the upper Columbia.

When irrigated fruit lands were first developed, the quick cash crops were strawberries and melons. Because of its early frost-free season, Kennewick always placed the first crates of Northwestern grown strawberries on the market, in Seattle, Portland, and Spokane. These were the Clark Seedling berries, and always commanded a good price. This plant was not a heavy bearer. Two hundred crates to the acre was a good crop. Then the Magoon plant was introduced to the area. This plant would produce up to six hundred crates per acre, but with its inferior quality, the reputation of the Kennewick strawberry was ruined. The strawberry weevil finally destroyed most of the acreage. So the strawberry acreage has almost disappeared from the valley.

The Kennewick Highlands Project, 6,000 acres of orchards, was one of the big agricultural boosts to the Kennewick area. The project was divided into five and ten-acre tracts and sold by the Northern Pacific Irrigation Company. This development was planned as apple country, but since apple trees in this area require eight years of growth before they produce, and peach trees only

three years, peach trees were planted between the apple trees. At one time, Kennewick shipped out as many as six thousand carloads of peaches in one season. "In 1912, Kennewick shipped out 8,000 cars of fruit."[18] One significant aspect of the Highlands Project was that every landowner received his domestic water supply from the company's above-ground conduits (Figure 45) and no wells were drilled. The orchards were good, and the farmers were successful horticulturalists. But, during the national depression of 1929 to 1932, the apple market was extremely low. The stories of men selling apples on street corners were true. Apples were cheap. Uncontrollable pests, unexpected frost during a blossoming period in 1931, and in some cases insufficient water and high pumping costs caused many to pull out their apple orchards and to concentrate on vegetables.

Since 1913, Kennewick has been identified as having the largest single Concord Grape Vineyard in the world (Figure 46), producing the highest tonnage per acre in the world. Because of abundant sunshine, the grapes in this area are famous for their naturally sweet quality.

Cherries, apricots, pears, plums, and prunes constitute other important fruit crops in the area. However, an extreme drop in temperature in the early fall of 1955 while the sap was still high, destroyed almost all cherry trees. Over 8,000 trees

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[18] Kennewick Courier-Reporter (Kennewick, Wash.), January 1, 1942.

MAY 1959

Fig. 45. Wooden conduits of the Kennewick Highlands Project. The pipes were laid above the ground for easier installation and maintenance purposes.

MAY 1959

Fig. 46. A portion of the Welch Vineyard. Housing developments have gone up around the vineyard.

have been pulled out in the valley area of Kennewick.

"The value of the vegetable harvest in the Kennewick area in 1939 totalled $360,000. Asparagus ranked first with a value of $198,000. The lettuce crop was valued at $53,000, melons and cantaloupes $37,000, and tomatoes at $11,000. Because this area has the earliest ripening season in the Northwest, the vegetables command a premium price in Portland, Seattle, and Spokane."[19] Mint became an important crop after World War II cut off foreign oil supplies. In 1944, over 2,100 acres were planted, yielding over $600,000.

Most of the downtown commercial area of Kennewick (Figure 47) was built to serve the agricultural population. The citizens of Kennewick enjoyed their small city, boasting of its grapes and lush fruit. Transportation of the fruit and farm machinery by truck was greatly increased when the highway bridge (Figure 48) was constructed in 1922. Before this time, railway and river traffic (Figure 49) were the only means Kennewick residents had for transportation to Pasco, Spokane, Portland, and the outside world.

The Population Boom and Its Effects

With a population of 1,918 in 1940, in the next decade Kennewick showed one of the biggest percentage population leaps

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[19] Bernard Goldhammer, The Economic Base for Power Markets in Benton and Franklin Counties, Bonneville Power Administration, November, 1953.

Fig. 47. Aerial view of the Downtown Kennewick Commercial Area.

Fig. 48. The first highway bridge. This photograph was taken while workmen were rushing to complete the center span.

Fig. 49. Kennewick waterfront in 1909. The four steamboats pictured, made regular stops here.

of any incorporated city in the United States, to 10,106 in 1950 - a gain of 427%. The function of the city now was not only as a city serving the agricultural area, but it became also a dormitory community for construction workers. The United States Government needed workers to construct the Pasco Naval Air Base and big Pasco Reconsignment Depot. In 1943, the federal government also contracted the E. I. DuPont Company to construct an atomic reactor plant, the Hanford Construction Camp, and housing facilities for 17,000 permanent employees at the plant. Since there was no available housing in Pasco and Richland, Kennewick was chosen as the place of residence for many workers on these construction projects.

First of the dormitories was Parkview Homes. Under the sponsorship of the city, the U. S. Government bought a twenty-six acre tract of agriculturally worthless land and erected frame longhouses of four, six, and ten units. Two hundred units were built, plus an administration building (the present City Hall), and a recreation hall. (Figure 50). In addition, space for 500 trailers was provided. (About where the Kennewick General Hospital now stands.) Some of these could hardly be called trailers. Makeshift boxes were hauled in, set on blocks, and the wheels removed. A washroom facility building was provided for each twenty trailers. The school district moved in barracks which became known as the Tenth Avenue School. The whole project cost some one and one-fourth million dollars.

MAY 1959

Fig. 50. Site of Parkview Homes. The recreation hall and Tenth Avenue School barracks buildings are in the background.

The city admistrations of this project paid back the U.S. Government every cent it invested. This wartime housing project was a big asset to Kennewick. The 700 new families made business boom, and brought new life to the city. When the project ceased operations and was removed in 1956, the whole area was presented to the city. "Not only had it given the city some $35,000 to $40,000 a year in taxes, but the administrators also presented a sum of $35,000 in cash to the city in profits from its administration."[20] When the General Electric Company took over the operation of Richland and the Hanford Works from the DuPont Company in 1947, there was a great new influx of families. The town of Richland could not grow fast enough, so living space was sought elsewhere. Housing was not only critical, it was practically impossible to find anywhere. Uniformed members of the patrol force in Richland made a house-to-house survey in Kennewick in an attempt to locate any spare rooms. The survey in Kennewick provided housing for only 100 General Electric workers. So Kennewick formed a Citizens Committee to work toward a goal of 1,000 new homes in two years. This committee was quite successful in inducing several private housing developments to be built. Vista Homes, Arbor Homes, Anna Lee Heights, Rudkin Heights, and Lampson Homesites were built up by 1949.

When land transportation facilities for about 2,000 people are suddenly expected to accommodate an estimated 18,000 cars and trucks in a day, overcrowded does not describe the condition

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[20] Interview with Ralph Reed, April 14, 1959.

which exists. These were the conditions of the highways and bridges in the Tri-City area while the construction of the Hanford Works and the construction of Richland was going on. During rush hour time, traffic was lined up bumper to bumper from Richland almost back to Kennewick, a distance of seven miles. Some autos never shifted out of second gear on the forty-five minute trip from Kennewick to Richland. Something had to be done for the development of adequate transportation. The Atomic Energy Commission, government control of Richland and the Hanford Atomic Works, hired engineers to plan a four-lane highway, a system of overpasses and a cloverleaf, and a four-lane bridge across the Columbia River. (Figure 51). The bridge, completed in 1953, provided a faster access of the workers to Pasco, but it did not contribute to the developement of Kennewick. In fact, it was a major factor for some workers to choose Pasco as their home instead of Kennewick.

As more people moved into the area, more businesses were constructed to fulfill the needs of the people. Location of business establishments is always important to their success. The new business section along Kennewick's Avenue C, the highway between Richland and Pasco, seemed to be an ideal location. Traffic had to slow down for the approach to the old highway bridge, so it would also stop for trade. Speculators went wild with enthusiasm as they erected businesses in this area.

Fig. 51. The 4-lane Highway Bridge. This photograph, taken in 1954, shows the new developments in Pasco. By 1959, developments have continued to move west(left) past the bridge. The levees of Wallula Lake have protected the cities from inundation.

The whole thirty acre tract of salt grass land was offered for sale at $3,000 in 1940. Five years later, some of these commercial lots sold for as much as $1,000 a front foot. Although this area was thriving tremendously, it came to a sudden halt. The builders had forgotten one important thing - they were too close to the Columbia River. In June of 1948 the river went on a rampage. Although it did improve the squalid conditions of the garbage-littered trailer camps along the river road, the flood did unestimable damage to property along its way. The entire Avenue "C" commercial area was inundated. In order to salvage some of their goods, businesses constructed open-air shops on higher ground in Kennewick. (Figure 52). After the construction of the McNary Pool levees, some businesses have again been built up, but the area has a minor significance as compared with the commercial area in 1948.

Although the construction of new housing developments had its greatest thrust before 1950, much of the Kennewick Highlands orchard land is now being developed into new housing projects. Many of the residents are ex-Richlanders who got tired of waiting for the government to sell the Richland property, and desired to own their own homes. They could not own their own homes in Richland, since it was forbidden by government regulation. The majority of these people chose Kennewick as their dormitory home rather than Pasco because of more available home sites with a river view, and because it was closer to

Fig. 52. Open-air shops for the disposal of flood-damaged goods in 1948.

Richland.

With the expansion of dwellings into the West Highlands, a new shopping district (Figure 53) was begun around the Angus Village Motel. This shopping center, called Vista Village, was begun as a $400,000 enterprise in 1955, and has been expanding ever since.

Impact of McNary Dam

McNary Dam (Figure 54) has left its mark on the development of Kennewick and the Tri-City area. While construction was progressing, many of the workers chose Kennewick as their dormitory home. In December, 1947, daily bus service was begun for the workers between Kennewick and the construction site, twenty-nine miles to the south. The dam backed up water twenty-five miles upstream from Kennewick and inundated 32,000 acres of land to form Wallula Lake. Along the cities of Kennewick and Pasco, 29.3 miles of levees were built to protect the cities.

The dam's hydro-electric power and navigation benefits have greatly increased Kennewick's industrial potential. The fourteen generators each add 70,000 kilowatts to the Bonneville Power Administration's Northwest Power Pool. The reservoir makes slack water navigation possible for sixty-one miles on the Columbia, and is one of the keys in providing slack water navigation from the Tri-Cities down to the Pacific Ocean. Each year since the dam was completed in 1953, the barge traffic

Fig. 53. A section of the Vista Village Shopping Center.

Fig. 54. McNary Dam. This photograph was taken in June, 1954.

between the Tri-City area and Portland has shown increases. Both upstream and downstream traffic from the Tri-Cities in 1958 amounted to 967,728 tons. With these transportation facilities, the Kennewick Port District has increased its activity. This, in turn has contributed to the development of Kennewick by bringing in chemical industries, increasing population, and with the population the establishment of new businesses.

In 1953, Clover Island was built up (after being submerged by the McNary Pool) and it was expanded to a twelve-acre area for a river terminal, small boat harbor, and marina development. The river developments have made this area a great summer playland for pleasure boaters and fishermen.

Kennewick as a Chemical Industrial Center

In 1953, Allied Chemical and Dye Corporation erected a $3,000,000 plant on Kennewick Port land to produce nitric acid on contract for A.E.C. in Richland. The key, however, for the chemical industry was the laying of a 300,000,000 cubic foot per day capacity natural gas pipeline into this area in 1956 from the San Juan Basin of New Mexico. That same year, a $15,000,000 plant was built east of Kennewick by Phillips Pacific Chemical Company. It uses the natural gas pipeline as a production material source. It has a capacity of producing two hundred tons of anyhydrous ammonia a day.

This Phillips plant then attracted other chemical plants. In 1957, a Gas-Ice Corporation, a comparatively small plant, was built to utilize a vented waste gas from the Phillips plant. It produces carbon dioxide and dry ice. Shortly thereafter, Kerley Chemical Corporation was built nearby. It uses the anhydrous ammonia produced by Phillips and combines it with sulphur and a catalyst to form nitro-sul, an agricultural fertilizer.

In 1959, the California Spray Chemical Corporation entered its first phase of operations by beginning construction of a $5,000,000 fertilizer division. One highly contributing factor in its chosen location on the Port District's Hedges site was that it contracted for 120 tons daily of the Phillips anhydrous ammonia. This plant hopes to be in operation sometime in 1960. The second phase of construction is to include an insecticide division, producing products with the Ortho label.

So Kennewick has already established itself as the chemical-industrial center for Eastern Washington. The Kennewick Port District is constantly working on the development of new construction sites, and advertising them to industries throughout the United States.[21]

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[21] Interview with John Neuman, Port District Manager, May 16, 1959.

CHAPTER V

RICHLAND, THE ATOMIC CITY

So far, in this study, we have seen how two of the three cities, Pasco and Kennewick, have developed. In both cases, the Northern Pacific Railway was a major factor in the founding and later development of the cities. Richland was different. The railroad had little or nothing to contribute to the founding of Richland, or to its later development. Richland still has no railroad within its city limits. (Figure 55). It was not until 1950 that a ten-mile spur track was built to connect the Hanford project with mainline railroads from the south. Richland depended entirely on irrigated agriculture, so wagon roads and paved highways were sufficient to haul the fruit and vegetable crops to the rail. Before the advent of motor vehicles, mail was delivered to Richland via a mail boat (Figure 56), which made two trips from Kennewick each day. Until about 1915, horse-drawn wagons hauled the fruit and vegetable crops to warehouses on the rail lines at Kennewick. Later, trucks transported the mail and agricultural produce.

The Rosencrance Homestead

The present site of Richland, located on the peninsula at the confluence of the Yakima and Columbia Rivers (Figure 57),

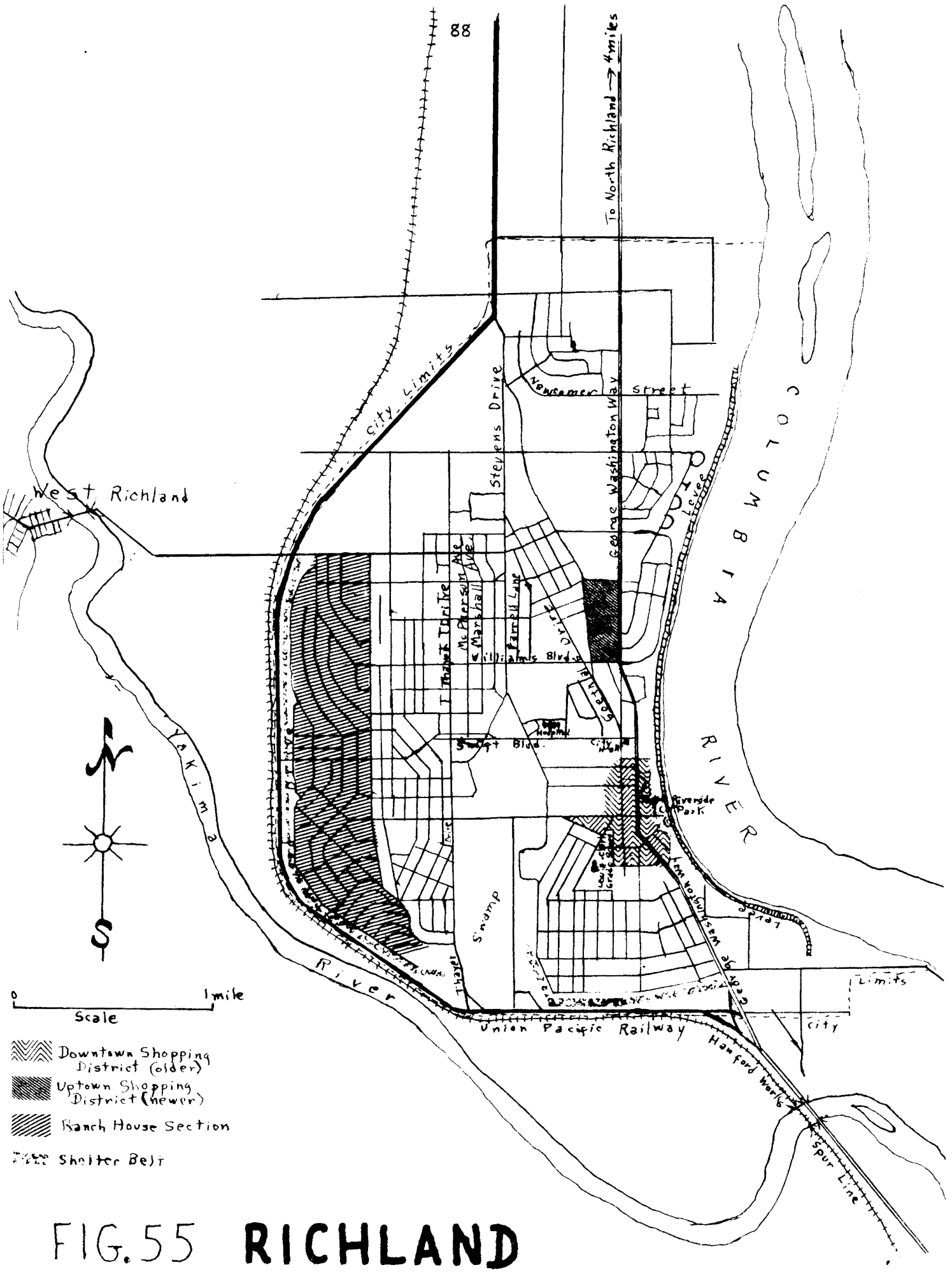

FIG. 55 **RICHLAND**

Fig. 56. The mail boat, Umatilla Flyer.

Fig. 57. Site of Richland. This photograph, looking north, shows the Yakima River in the foreground and the Columbia River in the background on the right.

was the farm home for a young couple who homesteaded here. Benjamin Jesse Rosencrance and Mary Hesket Rosencrance moved on their homestead in 1888. Before this time, they operated a stock ranch and stage coach station across the river at what is now known as the Richland "Y". Since the federal homestead laws required that they live on the land, they moved on their 1,700 acre homestead and built a house near the present Lewis and Clark school. The homestead laws provided for a timber claim in all sections of the country; so, in this semi-arid desert region, they dug willows from the river bank and set them out to establish timber rights. The Rosencrances filed timber, desert, mineral, and pre-emption claims, and thus were able to secure a large tract of land.

By 1894, Rosencrance decided to irrigate his land. He built a thirty-two feet high irrigation wheel on the Yakima River on a section line directly south of the present Kadlec Hospital. (Figure 58). This wheel was in operation from 1894 to 1904. It lifted 320 gallons of water to near its full height at each revolution and sent it on its way through a flume to the farmland. Although there was great difficulty in raising and lowering the wheel before and after flood time, the wheel diverted enough water to irrigate over a thousand acres. This factor was the key in the development of farmland and the settlement by other farmers.

Fig. 58. The Rosencrance Water Wheel. This is a photograph of a painting by O. Koon of Kennewick.

Richland as a Fruit Town

In 1904, the Rosencrances sold their land to Howard Amon, who platted it into a town. He advertised a contest for the naming of the town, and the oldest Rosencrance daughter, Althea, won a lot in the new city (where the village theater now stands) for naming it Richland, describing the land which had once been barren wastes. Amon organized the Benton County Water Company and built a canal six miles long, known as the lowline ditch, with a capacity to irrigate 3,500 acres. Since the normal flow on the canal could produce 300 horsepower, he also constructed a power and light company on the canal which could operate during the irrigation season. Since almost all capital for development was provided by this one man, the community park (Figure 59) was named Amon Park. Today it is slightly enlarged and is called Riverside Park.

A private firm, the Horn Rapids Irrigation Company, with hand equipment and horses, built what is known as the highline ditch. This ditch included about twenty miles of canals and about twenty miles of pipelines and laterals. (Figure 60). The building of this irrigation system brought the first construction crew to the city. Richland was isolated from the flow of westward population, because the flow of traffic went along the more easily traveled south side of the Yakima River. As a promotionary measure, two autos went to the Kennewick Railway

Fig. 59. Amon Park.

MAY 1959

Fig. 60. A remnant of the highline ditch. This was one of the major factors in the establishment and development of Early Richland.

Station each day to recruit construction workers and prospective farm families for Richland. Those that came were pleased with the sight of the abundant fruit crops which this area was already producing. Some of the people secured jobs picking the fruit (Figure 61) during their first season in Richland.

By April 4, 1910, Richland became an incorporated city. At the time of incorporation, the Twin-City Reporter, Pasco newspaper, described the town like this: "This town has three church organizations - Lutheran, Methodist, and Christian. Three general merchandise stores, of which one, Richland Trading Company, also carries a line of furniture. It has a hardware store, drugstore, bank, meat market, restaurant, barber shop, livery stable, lumber yards, and three hotels."

In 1919, veterans of World War I who desired homesteads, settled along the narrow strip of Columbia Valley land north of Richland. The land was still available for homesteading in 1919 because the first settlers in this area did not choose to live in such a remote desert land of the United States. Farmers of the area organized the Richland Irrigation Company in 1919. They bought out the interests of the Horn Rapids Irrigation Company and proceeded to bring water to approximately 5,000 acres by constructing new canals, repairing old ones, and by installing a steam pump along the Columbia River.

By 1942, Richland still was a small village with a

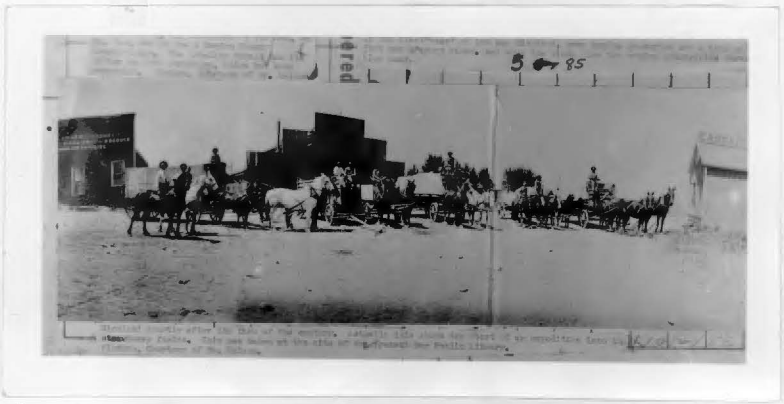

Fig. 61. Workers of Early Richland assembling to enter the strawberry fields. This photograph was taken at the site of the present day Richland Public Library.

population of 247 living near its shaded center, close to the downtown nucleus of stores. Each store owner also did some farming as a sideline business. (Figure 62). The village was entirely dependent upon an agricultural industry of the surrounding community of about another 1,000 people. The important fruit and vegetable crops grown here were cherries, apricots, grapes, peppermint, asparagus, and strawberries. Since the village adequately served the population in that vicinity at that time, there was no promotional activity for increase in size. The people were satisfied to remain an agricultural community in a relatively isolated location. But their way of life and the natural use of the land were entirely interrupted by a cultural rather than a natural force.

The Removal of Early Richland

Because a boundary of secrecy could be provided, and there was an abundance of cool water, the U.S. Government chose to build an atomic industry in this area. On March 6, 1943, under the War Powers Act, an order of possession, a form of condemnation, was issued for all the land in the area that was to be acquired. The days of the natural use of this land, as an agricultural area, were over. The village could no longer exist as a fruit and vegetable center. The government sought title to 428,000 acres of land. A total of 189,000 acres were to be leased, and 41,000 more acres were to be placed under restrictive agreement. The

Fig. 62. A residence along the main street of Early Richland. Most residents directly contributed to the agricultural economy.

whole area sought by Hanford Engineer Works also included the towns of Hanford (population 100) and White Bluffs (population 200), each about twenty miles apart along the Columbia River.

This was war time, and secrecy of operation was of utmost importance. Plans were to use Richland as a site for a permanent city and Hanford as a construction camp. Although some farmers were permitted to finish out the crop season of 1943, many moved earlier. Most of them sought housing in already-crowded Kennewick and Pasco. Richland was immediately disincorporated to maintain secret operations, and it became the biggest village in the state.

The Hanford Project

Why did the population have to be displaced? What was this project? Although no one was told the reason at the time, scientists had discovered something 500,000 times as powerful as TNT. Plutonium had been produced in an atomic reactor, or pile, under the athletic stadium at the University of Chicago. So it was decided to repeat this process in huge reactors at the Hanford Plant, and produce plutonium on a larger scale. This did not offer a great deal of support for an initial investment of $350,000,000, but circumstances did not permit further experiments. There were signs that Germany was moving fast in the field of atomic research, and the nation which won the race would probably win the war.

What were the factors which made the government officials choose this area? First, they needed a good power source, and they found it in the Bonneville and Coulee Power Systems. Second, a steady supply of pure, cold water was necessary for the cooling of the graphite in the proposed reactors. The Columbia River provided this. Third, geologists showed that waste water from the reactors could be pumped out on the sandy desert, a natural filter bed, and return to the river by seepage. Thus the river would not be contaminated with radioactive particles. Fourth, this undulating table land, seventy-nine per cent of which was a desolate region of gray sand, gray-green sagebrush, and dried water courses would provide plenty of space for the reactors to be in separate areas without removing too many people. The Columbia River on the east and the desert on the west would provide a boundary of security so necessary in this war time. Fifth, the climatic conditions in this area for the speed of construction was needed. Workers would not be hampered by rain or mud. Sixth, the number of residents who had to be evacuated was at a minimum compared with what might be necessary at other sites. Although twenty-one per cent of the area was in farm land, the area averaged only 2.2 persons per square mile. The cost of the land was generally less than it would be in other areas. Government appraisers offered a flat rate of $150 per acre for all irrigated land. Many landowners took their cases

to court, and all that did received from fifty per cent to one hundred per cent more for their land.

Although this study does not name the Hanford Construction Camp in its title, one cannot begin to understand the factors which caused the development of Richland, or the Tri-Cities, without this background knowledge. The layout for the present city of Richland and the building of Hanford occurred simultaneously. Hanford was the construction camp and Richland was the city built with an expected permanency of at least five years. So we shall consider Hanford first.

Facilities had to be constructed to house and serve 39,050 workers. Temporary hutments and barracks filled this need after three months of construction. In the same area, 6,390 trailers, the largest trailer camp in the history of the world, cared for another 12,000 workers and their families. This construction camp of some 51,000 people was five times larger than any gold camp of the early West.

To keep a working force of some 45,000 people on an area of the world where people don't ordinarily choose to live, required great recruitment efforts. The Manhattan Project worked with the War Manpower Commission and the U.S. Employment Service in an elaborate recruitment program that extended all through the construction period. Recruited workers were to receive railroad coach fare of up to $100 from the point of recruitment

to Pasco, provided that they worked four months and their attendance was satisfactory. If they worked an added three months, they would receive return fare.[22] Now, one can easily understand the problems which Pasco had during this construction period.

Advantages stressed by the recruiters were that the rent of $1.40 per week included janitor service, and there was all the food you could eat, served in family style. While meat was rationed in other parts of the United States, the construction workers were served meat twice a day. This was deemed necessary to satisfy the people and to keep the workers from leaving their jobs.

Even though this was a glutton's paradise, there still was not enough incentive for some of the people to stay in this area. Over 8,500 pieces of major construction equipment (if lined up, would stretch for more than thirty-five miles) were moving some 25,000,000 cubic yards of earth. The sunshine was plentiful, and so was the wind. After a desert sand storm, nicknamed termination wind, as many as 600 workers quit their jobs on a single day. Over 150,000 people had to be recruited and hired to keep a working force of less than 50,000 during these seventeen months of construction. Workers who were fortunate enough to find living quarters in Pasco and Kennewick were not bothered as much by the dust storms. The wind direction

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[22]The Atomic Energy Commission, Hanford. November 1,1955.

is generally south or southwest. Thus, the loose earth, moved by construction equipment, blew in a north or northeasterly direction, away from these cities.

With such a procession of people coming and going, it is not hard to imagine that the post office was in a state of confusion. "There was never a bigger general delivery section in any post office in the United States... From June to December of 1943, the post office was moved five times to add to the confusion. Finally, one was built with twelve general delivery windows (250 separations per window), five money order windows, and a huge lobby."[23]

Even while camp officials were doing everything they could to keep this working force on the desert, morale was quite low at times. Workers demanded more recreational facilities, or they threatened to quit the project en masse. Because of the secrecy, they didn't know what their work was accomplishing anyway, so they were in a position to demand. "A Washington high brass decided that something must be done for morale, and gave the order. A $1,000,000 auditorium was put up in ten days' time. Searthlights played over the project at night, and workers swarmed over it twenty-four hours a day."[24] More than 4,000 persons were dancing in the big building in June, 1944, on the twelfth night after ground-breaking. As an added incentive for staying on the desert, famous name bands such as Ted Weems,

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[23] Columbia Basin News (Pasco, Wash.), May 6, 1958.

[24] Tacoma News Tribune (Tacoma, Wash.), March 13, 1949.

Kay Kaiser, and Curt Sykes performed here during the short three months of the building's use. But even this was not enough incentive to stay, for some. The Hanford Works Employees Association received and spent $360,000 in its short life to please the workers. Ball diamonds (Figure 63), with bleachers capable of holding 4,000 persons, were built, and other recreational activities were provided.

To further realize the magnitude of this great project on the desert, the declassified A.E.C. statistics show this: The building of Hanford required 780,000 yards of concrete. More than 160 million board feet of lumber was used. That's enough to build a five foot solid board fence 5,000 miles long, or from San Francisco to Tokyo, if that were possible. At this project, 158 miles of railroads were laid, connecting with the Milwaukee Road rail line at the northern edge of the reservation. (Figure 9).

The building of Hanford and its continued operation is by far the most important single factor in the development of the Tri-Cities. It brought the population boom for the entire area. With the population, came the development of more adequate highway transportation, service type businesses, and most of the problems of expansion which any rapidly developing area faces.

The first of the three reactors began operating in September, 1944. The initial construction had been completed

Fig. 63. A Hanford Baseball Diamond. Recreation facilities had to be provided to keep the working force in this desert region.

and the area had to be evacuated. The isolated area was necessary in case of any accident at the reactors. This type of reactor could not explode in the atomic bomb sense, but in case of an enemy air attack, earthquake, or some other calamity, the surrounding immediate area could become dangerously radioactive.

Today, only the criss-cross paved streets and the concrete footings reveal the place where the largest construction camp in history once stood. Various writers have called the Hanford camp the "empress of the ephemerida," or "princess of the plectoptera," which describes certain insects which appear at some seasons in great swarms and then fade from existence in a few hours or days.

DuPont Control of Richland

Private industries were asked to take over construction for this project. For the first five years, the E. I. DuPont Company was awarded the contract. G. A. Pherson of Spokane was drafted to plan the city of Richland, which was to house and accommodate 15,000 people for a five-year period. Half of the Nelson and Dam grocery store (Figure 64) became the first draftsman's office. A sub-contractor set up offices in the old Grange Hall and put crews to work excavating the first of 2,500 basements on the corner of what is now Thayer Drive and Williams Boulevard. Buildings in Pasco were used for other

Fig. 64. Site of the Nelson and Dam Grocery Store. The Stauffer Studio now occupies the building, the upper story having been removed.

office and warehouse space. Office workers were housed in the spare rooms, basements, and back porches of Pasco and Kennewick.

By July of 1943, the first tenants moved in, caravan style, from the army trailer camp in Pasco. The first order of development of the town was to get the houses up so that more workers could come. All of this went on simultaneously with the construction in the mysterious Hanford Engineer Works. Bulldozers were moving the once good farm soil, laying out the first of 55.2 miles of streets. Heaps of concrete bathtubs arrived and were stacked gauntly in piles along the main roads. Roof trees of "A" houses, "B" houses, and "F" houses stood in piles, waiting for their underpinning. The terrain was rapidly being changed by man, but not fast enough. Families from every state in the country came to the area and filled every available housing facility. When housing was gone, they camped anywhere a bit of shade was available - mostly along the rivers. Since there was no manna to be found in this desert area, food was a big problem. While the men were busy working behind the mysterious barricade, housewives followed the pattern of earlier pioneers and spent their time foraging for food. Milk and meat were available at the one grocery store until it was gone. Then, the stores in Kennewick offered the next closest supply. On December 24, Transient Quarters (Figure 65a) was opened, and shortly thereafter the luckiest men got rooms in the first men's dormitory, J-5.

Fig. 65a. Transient Quarters, now called the Desert Inn Hotel. It is still the only hotel in Richland

(Figure 65b). Soon afterward, new tenants looked out on the fabulous view from the section along the Columbia River, soon labeled Snob Nob, now called the Gold Coast. It was so named because the residents here were those who had the highest-paying jobs, and received first priority for the choice location.

In February of 1944, some street pattern began to develop from the construction of the city. "A", "B", "C", and "D" Streets changed to Thayer, McPherson, Marshall, and Williams, in honor of past Army engineers. Kosciusko, proud name though it was, proved too much of a stickler for its residents to spell, and was changed to Farrell Lane. During this time the soil erosion was terriffic. Man had tampered with nature, and the land laid bare by the mass excavations, swirled to the skies in the worst dust storms this area had ever known. Busses put on lights and stopped by the side of the road because of impossible visibility. Children dug in the dust piles, as they watched trucks chugging by with the first 1,800 pre-fab houses. As spring turned to summer, there began the largest mass planting by amateur gardeners in history. Instructions and bags of seed were delivered to all houses, and the era of sprinkling began. The desert was a blooming green again.

During the summer of 1944, the downtown business section developed around the original nucleus of stores. The new post office (Figure 66) had been built and mail delivery service began.

Fig 65b. A section of the dormitories. A heating plant (smokestack left of center) provides for all buildings in this 700 Area.

Fig. 66. The Richland Post Office.

Fewer requests and complaints came to the Tenant Service, which was the landlord, city council, information center, and friend-in-need to everyone. Although there were complaints of asparagus pushing up through some pre-fab floors, the residents were becoming more accustomed to living in this area which once had been valuable farm land.[25]

When the war ended in August of 1945, there was a great deal of uncertainty about Richland's future. Originally, the atomic plant had been considered a wartime project only. About 4,000 frame homes had been built in Richland.

The E. I. DuPont Company asked to be relieved from the responsibility for the operation of the Hanford Works and for the control of Richland. Under provisions of its contract, DuPont made a profit of one dollar for the building of the construction camp, the industrial plants, and the city of Richland. The desert land had been changed to an artificial usefulness.

General Electric Control of Richland

When General Electric Company took over on September 1, 1946, it allowed everybody who wanted to, to change quarters and make a move. There was a grand scramble of house changing. Project forces also were painting all the houses. During the war years, project houses all wore the same battle dress.

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[25] The Villager (Richland, Wash.), September 3, 1945.

Expansion, not retrenchment, was the program presented to the General Electric Company by the newly-formed Atomic Energy Commission. Three reactors and separations plants had been built and were all in operation except for one separation plant. It was already outmoded. Now, plans for five new reactors and plant facilities were drawn. An additional 150,000 acres of land were bought to expand to the five new acres. This brought the size of the Hanford Atomic Reservation to 647 square miles.

Housing again became critical as Richland tried to make ready for the anticipated increase of 10,000 people. J. Gordon Turnbull, one of our nation's outstanding construction engineers, drew up the master plan which would consider expansion for Richland to 25,000, with the provision for ultimately going to a population of 35,000.

While this new construction project took shape, recruitment workers were again on the road, on a smaller scale than for the original Hanford Construction Camp. In order to induce this new population to come to Richland, a semi-welfare state of living conditions was offered. Extremely low housing rentals were offered, and free community services were almost unbelievable. During 1947, no Richland householder was permitted to do so much as to replace a fuse. An electrician came to correct the situation. The government assumed complete control. Top wages, of course,

was the greatest incentive for recruitment. In 1954, for example, the average income for each Richland worker was $5,700, while the average family income in the United States was $3,700.

Even with these incentives to live in Richland, many residents sang the termination-wind blues. Some left. Others took their places. In 1947-1948, a desperate attempt was made to combat the desert wind. A five-mile long shelter belt (Figure 67) of 22,000 trees was planted around the west and south sides of the city, this being the predominant wind direction.

When Richland was first planned on a five year permanency, only one of each type of retail store besides grocery was permitted in the downtown shopping district. Since there was no competition, prices had to be rigidly controlled. With the population steadily increasing daily, the shops were overtaxed and long lines were formed at the one service station and the one 16-chair barber shop. It became evident that the town's three-year old business district would have to be more than doubled to adequately serve the residents. In the original city plan, the business district could serve the 15,000 people for which it was designed. But now the district couldn't grow extensively because it was hemmed in by the light industry area, a residential area, the Columbia River, and the Town Square. But, more retail stores were needed for the increased population. So the city planners decided to take a bold step. They selected

Fig. 67. The shelter belt south and west of Richland. This has done much to combat wind erosion.

a vacant area several blocks north of the existing business district to be the site of the new one. This was away from the residential area. This new commercial area was the scene of heavy construction and earth moving in the summer of 1948. A small stream (Figure 68) that wandered approximately through the center of the area was diverted into a huge concrete culvert, 5 feet x 6 feet and 3,252 feet long.

The first of the fifty retail stores opened in 1949. Adequate parking facilities, and advertising by the Uptown Merchants Association have caused some downtown stores to close. (Figure 69). "In 1953, the business volume in Richland hit the $25,000,000 mark. Richlanders had a per capita spendable income of $1,113, and the per capita spending was $925. The 200 Richland merchants in the two shopping areas and five neighborhood areas did a business of $35.07 per square foot of store space."[26]

The Columbia River was one of the major factors in the location of the Hanford Atomic Works, and consequently, Richland. It was this same river which almost destroyed Richland in 1948. For several days during that June, all building operations behind the Hanford barricade stopped while the bulldozers and trucks constructed the dike which did save the village. But the flood washed out thirty-five miles of primary state and county roads.

A contract had already been let in May of 1948 to build

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[26] Yakima Herald, (Yakima, Wash.), June 22, 1954.

Fig. 68. The stream which flows under the Uptown Richland shopping district.

Fig. 69. A portion of Downtown Richland. The Variety Store pictured could not meet the competition of Uptown Richland, so it was vacated.

a wider highway to ease the overcrowded highway conditions between Richland and Kennewick. The June flood brought action a little faster. To alleviate the desperate situation, the first project was for the A.E.C. to construct a four-lane highway from Kennewick to the Richland "Y". This meant the acquisition of a right-of-way on higher ground to prevent further inundation by the Columbia River. This new highway, the first four-lane highway in Southeastern Washington, created a strip of land between the new highway and the river (Figure 70), now known as Columbia Park. The second project was the construction of a road bed and four-lane highway twelve feet above high water level from the "Y" to Richland. (Figure 71). This twelve-foot fill had to be hauled in to prevent future road inundation here at the mouth of the Yakima River.

The two-lane county bridge across the Yakima River to Richland served the town when agriculture was its economy, but it was entirely incapable of handling the traffic for the atomic workers. The A.E.C. first added a two-lane wooden piling bridge in 1947, and later replaced it with a Bailey (Army type) bridge for temporary use. By the end of 1951, the traffic problem of the crossing of the natural barrier, the Yakima River, had been solved. A 760-foot bridge (Figure 72) had been built at a cost of $472,606. A year earlier the river had been spanned by the railroad bridge on the spur line to the Northern Pacific.

Fig. 70. Columbia Park. The five mile strip of land between the 4-lane highway and the Columbia River is the park area.

Fig. 71. The elevated roadbed. The remains of the Claybell Barn Tavern stand at the level of the old road.

Fig. 72. The bridges across the Yakima River. They helped to relieve traffic problems.

This line took the place of some of the truck traffic on the highway, thus relieving congestion.

Disposal of Richland

All but 1,000 of the 6,056 homes in Richland have been built under government contract, and were under the control of the General Electric Company. Under the Sherry Act of 1952, these 1,000 homes were permitted to be built by two private firms.

By 1949, General Electric had begun, step by step, to gradually take the residents off the wartime paternal system of operation, and to get the residents to assume the normal responsibilities of city living. It was no longer necessary to offer all the bonuses of almost free living conditions. It began to be a more settled and stable community. But, the people wanted all they could get. When the item of coal was taken off the free list, residents heated their homes with their ovens or electric heaters because electricity was still free. Since it was easier than using the ditches, all irrigating of lawn and gardens was done with city water. Most Richlanders let their irrigation water run constantly. But, the day when water meters went into operation, water consumption in the city was cut approximately in half. By 1950, the bonuses of free coal, telephone, lights, furniture, and services were no longer considered necessary.

Despite balloting of about three to one against home ownership, and a vote by a narrower margin against self-government, the United States Congress passed a bill providing for the disposal of Richland and Oak Ridge, Tennessee. The disposal bill gave Richlanders five years from August 1, 1955 to take over the town's facilities and government. Government subsidies promise to be continued for another ten years to keep the level of community services so that recruitment of more atomic workers won't be hampered.

When the Federal Housing Authority appraisers published the prices of the homes, nearly 7,900 persons signed petitions saying that they would move from Richland before they would buy their homes at the announced prices. To them, this area was not the "California of the Northwest". Their major complaint was that the Federal Housing Authority used Pasco and Kennewick prices in reaching their price decisions. No deductions were made for the one-industry angle of consideration.

In October of 1956, another appraisal was made by a private firm. Such things as the morale of the workers and the one-industry nature of the town was to be considered. The congressional disposal bill called for a minimum disruption of working personnel. The first choices for buying residenced were given to present occupants. By September of 1958, over ninety per cent of the houses were sold. Priority holders were able

to buy at twenty-five per cent under a lower appraisal price, with two discounts made available to them. One discount was to recognize the age of the houses and the unique nature of the development of the town, and the other discount was in lieu of indemnification against the closing of the Hanford plant.

Since the families had rented the houses, they had little incentive for improvement projects until the houses were their own. At once there were new rooms, fireplaces, swimming pools, garages, and carports built. The first stone and brick homes in the city began to be built on vacant lots and north of the city. (Figure 73).

Richland as a Re-Incorporated City

While the giant disposal sale was still underway, petitions were filed with the Benton County Commission asking for a special election on incorporation. This was held on July 15, 1958, and incorporation carried by a four-to-one margin. Richland became the eleventh largest city in the state of Washington.

In 1959, the city is having its problems and joys of writing city ordinances, moving into the new city hall (Figure 74), and gradually assuming the duties and obligations of self-government. One problem it faces is quite familiar to them, but was always taken care of by someone else. It is a problem of using space to the best advantage. They need to make accommodations for more than 2,000 new workers. Yes, Richland is booming

MAY 1959

Fig. 73. New housing developments north of Richland's city limits. The remains of a cherry orchard are in the foreground.

MAY 1959

Fig. 74. The Richland City Hall. The U. S. Congress appropriated $2,215,000 for this building and other city improvements to give the new city a good start.

in construction again. The U.S. Government has authorized the building of the ninth Hanford reactor, and the first phase of construction is in progress.

West Richland

West Richland, considered a part of the Tri-City area, may be considered one of the suburbs of Richland. When Richland expanded in 1948, some of the newcomers had the fond desire to own their own land and property, and desperately needed a place to live. So they went four miles west of Richland, across the Yakima River off government land, and began their own little village. (Figure 75). In 1949, West Richland had an estimated 1,000 people, and new businesses were springing up. But after the first sudden spurt, its growth slowed measurably and the effects of the boom and bust construction time at the Hanford plant caused a sharp decline in population. A greenhouse, filling station, realty firm, gift shop, and motel had been opened as commercial endeavors and were continued. West Richland continues to be a residential area for Richlanders who prefer country living.

The Richland "Y"

During the time of Hanford construction, temporary housing and trailer camps were built up all along Highway 410 between Richland and Kennewick. The heaviest concentration of this housing

MAY 1959

Fig. 75. West Richland. This photograph, looking east, shows the scattered village settlement of those Richland workers who preferred to own their own homes.

was at the junction of the Richland highway and Highway 410 three miles south of Richland and six miles northwest of Kennewick. This "Y" was said to be the largest American community without a name. Although Kenrich and Port Atom were suggested, the place was never incorporated. The cluster of businesses continued to be called the Richland "Y" (Figure 76), and the area east of this is called Island View. Mostly low-class houses and vacated huts (Figure 77) are found in this residential area. When the new highway overpass was built, much of the trade for the businesses was cut off.

North Richland

The development of North Richland is another story of a boom and bust construction camp. When the construction of the five reactor acres was begun under General Electric Company control, there was no room in Richland for the construction workers. The people were not permitted on the reservation, so an area directly south of the barricade, five miles north of Richland, became the new construction camp.

Crews constructed another trailer camp site on 160 acres of desert sand surrounding a four acre apricot orchard. Wooden canopies (Figure 78) were built to shield the trailers from the hot sun. Streets were paved and water mains were laid, getting ready for the population. After the trailers arrived from every one of the forty-eight states, the residents were provided with

Fig. 76. The Richland Y Business District.

Fig. 77. Typical residences in Island View. At one time, during Hanford construction days from 1943 to 1955, workers were consid-

Fig. 78. Trailer canopies in North Richland.

good topsoil and grass seed to make this trailer camp on the desert one of the most beautiful ever known. The trailers could not accommodate all of the 10,000 population. The last remnant of the wartime Hanford Construction Camp, 132 barracks, was moved to the new area. Trucks hauled in 200 houses from the Bremerton Ship Yards Camp. Other crews moved the 86-bed hospital and forty-six 2-story barracks building on to barges and towed them up the Columbia four miles from the Pasco Naval Air Station, and lowered them into position on foundations already prepared. (Figure 79).

North Richland had only one grade school, which served also as a community center for the population. This John Ball School (Figure 80) was a unique example of desert construction, where space is plentiful. Along both sides of a main corridor, quonset classrooms were attached as they were needed. Construction of the building stopped when the corridor was 640 feet long. By operating on half-day shifts, it could accommodate the 920 pupils.

By 1950, the 518th Anti-Aircraft Battalion arrived from Fort Lewis to protect the reactor areas from possible air attack. The barracks area was taken over and North Richland became Camp Hanford. Civilian population decreased rapidly as construction was completed. Its usefulness as a city was over. With the coming of the Nike missiles and the jet air base at Moses Lake,

Fig. 79. Barracks buildings in North Richland. The buildings, now being removed, were barged across the Columbia River from the Pasco Naval Air Station.

Fig. 80. John Ball Grade School in North Richland. It now serves as a messhall for Camp Hanford.

even the Army population dwindled. Today, many of the buildings are being removed or demolished, and there are less than 1,000 Army personnel left at the camp. Streets and fireplugs (Figure 81), now overgrown with the typical thistle vegetation, mark site of the construction camp of North Richland.

In this Richland area, then, we see that man's decisions greatly influence land use. Man has changed the natural use of the soil, that of irrigated farm land, to an artificial use, the atomic plant. When man disrupted the natural land use, a serious complication - wind erosion - was the result. Under these conditions, it was difficult to develop an urban center on land which was not destined by Nature to support such a population.

DEC 1958

Fig. 81. Site of the North Richland trailer camp. Streets and fireplugs (center) mark an area once densely populated. Natural vegetation is returning gradually.

CHAPTER VI

SUMMARY AND PROSPECT

Summary

The Tri-Cities, Pasco, Kennewick, and Richland, Washington are all located within a radius of seven miles in the Southeastern section of the state, at the southern edge of the Columbia Basin, near the confluence of the Yakima and Snake Rivers with the Columbia River. The Cascade Mountains on the west, the Blue Mountains on the east, and the Canadian Rockies on the north make this a semi-arid desert region where irrigation is necessary for agriculture in the valley areas.

This study shows that the development of the Tri-Cities has gone by spurts rather than a gradual increase. The development of each city has been a story of a boom period and a leveling off and adjustment, another boom and the necessary adjustments to it. The railroads, highways, irrigation projects, and federal government installations have been the major factors in development.

The largest single factor in the rapid development of the three cities since World War II, was the construction, operation, and expansion of the Atomic Energy Commission's Hanford Works. Richland, the small village based on an economy of irrigated agriculture, has been displaced by Richland, the permanent city for employees of Hanford Works. Because the Hanford Atomic Reservation was a restricted

area, commercial agriculture in the Richland area has entirely disappeared. From 1943 to 1958, Richland was entirely under federal government control. During this time, all development in Richland was controlled by the government. It was this factor, the construction and maintenance of the atomic plant, which brought about the consideration of these three cities as one Tri-City metropolitan area.

The three rivers, Columbia, Snake, and Yakima, have been the greatest natural factor in Tri-City development. Pasco and Kennewick both had their origin as railroad terminal points during bridge construction across the Columbia River. This river was also a contributing factor in the choice for the Hanford Atomic Plant. The consistent amount of pure, cold water was necessary for cooling the reactors.

Until the building of the atomic plant, the development of Pasco depended entirely on the growth of the Northern Pacific Railway and the Seattle, Portland, and Spokane Railway. This growth depended upon the development of the agricultural hinterland. The city of Pasco functioned as a transportation and distribution center for these agricultural products. The Columbia Basin Project has been a major factor in increased business volume.

During World War II, the federal government installations, Pasco Naval Air Station, Little Pasco Supply Depot, and Big Pasco Reconsignment Depot added to the population and economy of the Tri-

Cities. Since 1945, the population of construction workers on federal dam projects has found an unusual permanency in this area. With their homes in these cities, they have been in close enough proximity to work on McNary Dam, Priest Rapids Dam, Chandler Dam, and John Day Dam, all located within a radius of forty miles.

A hinterland of dryland wheat farming on the Horse Heaven Plateau and irrigated agriculture in the valley contributed to the development of Kennewick. As the farming industry grew, so did the urban area of Kennewick. The construction of the Hanford Atomic Plant, however, placed emphasis on the increased interdependence of all three cities. Kennewick became the major dormitory city for employees who could not find housing facilities in Richland. The natural gas line from the San Juan Basin in New Mexico was laid through this area in 1956. This was the key factor in the establishment of chemical plants near Kennewick, making it the leading chemical center for this part of the state.

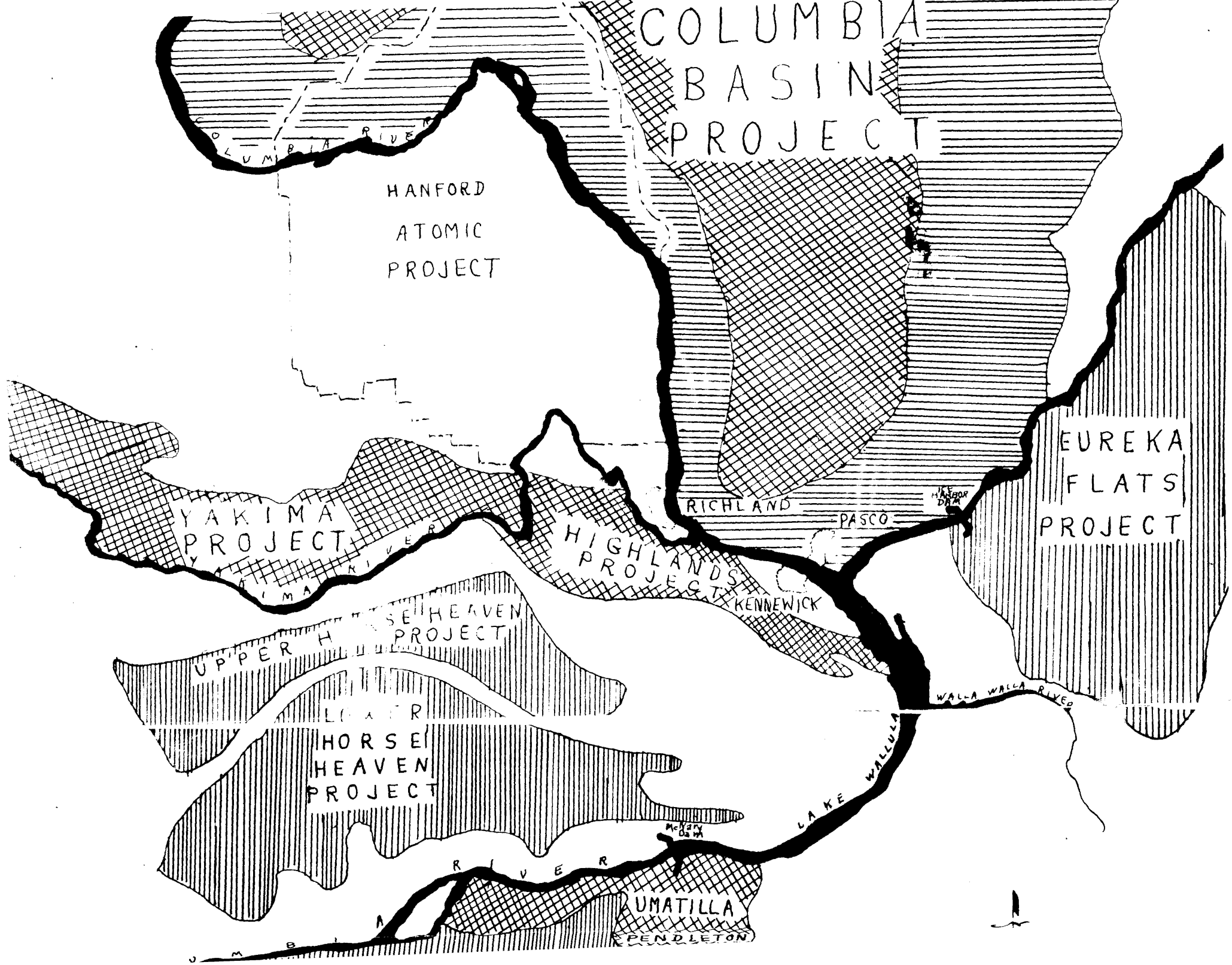
The federal government holds the key for further development of the cities. Depending upon government appropriations, water will be pumped to irrigate more land, dam developments will improve navigation on the rivers, and construction of new atomic reactors will continue to affect the development of the urban centers. Increased development, then, depends directly upon the actions of the United States Government.

Prospect

The continued development of the Tri-City area depends almost entirely on the continued appropriations of the federal government. If the scientists should discover a more economical way to produce plutonium, or if something more powerful than atomic energy should be discovered, Richland would have no reason to exist, and many of the residents of Kennewick and Pasco would have to seek new occupations. If the federal government would decide that it already has too much agricultural surplus and that reclamation projects are not necessary, the construction of dams on the rivers would be halted. This would not only affect the development of agriculture, but the industrial prospect would be considerably dimmer. The prospect, however, at this time is not so gloomy, since the trend of government actions has been favorable toward this area in the past two decades.

Agricultural Prospect

Proposed irrigation prospects (Fig. 82) indeed look bright. The Columbia Basin Project includes more than 186,000 acres under irrigation at the present time. According to the plan of the Bureau of Reclamation, 70,000 acres are to be developed annually until the entire 1,096,000 acre project is complete. In March of 1959, the federal government released a portion of the Hanford Atomic Reservation for irrigation development. Because of its location, Pasco has been and probably will continue to be most affacted by Columbia Basin development.


COLUMBIA BASIN PROJECT
COLUMBIA RIVER
HANFORD ATOMIC PROJECT
YAKIMA PROJECT
YAKIMA RIVER
HIGHLANDS PROJECT
RICHLAND
PASCO
KENNEWICK
EUREKA FLATS PROJECT
UPPER HORSE HEAVEN PROJECT
LOWER HORSE HEAVEN PROJECT
McNARY DAM
LAKE WALLULA
WALLA WALLA RIVER
UMATILLA
PENDLETON

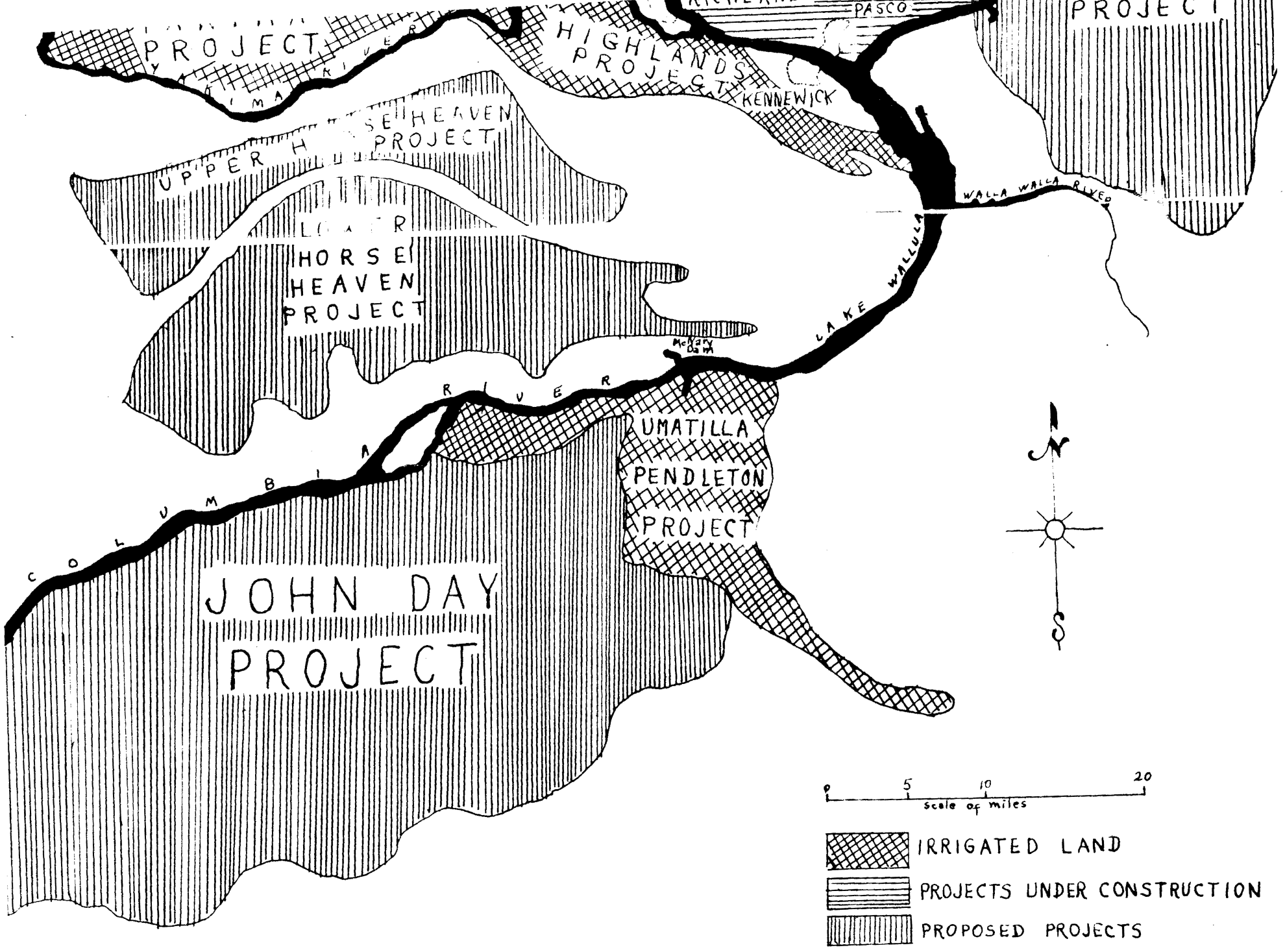


FIG.82 **IRRIGATION DEVELOPMENTS**

The Yakima Valley Project already has 750,000 acres under irrigation. After the completion of Chandler Dam on the Yakima River in 1957, the Highlands Irrigation Project was begun. By this time, approximately 125 farms averaging 80 acres each have been given water rights. Some hay, grain, bean, and potato crops have already been harvested on this new land, but much of the sagebrush is still being cleared. (Fig. 83) This 17,000 acre area is expected to develop into one of the best fruit-producing areas in the state. Seedling orchards, following the old pattern of a combination of apple and peach trees, have already been planted. Kennewick has already been established as a market center for this new development. It should also increase as a source for farm machinery and other agricultural supplies.

Still under consideration and study by the Bureau of Reclamation are the Eureka Flats Project, Upper and Lower Horse Heaven Projects, and the John Day Project. Ice Harbor Dam, on the Snake River, is scheduled for completion sometime in 1961. (Fig. 84) If the Eureka Flats Project is developed, the water behind Ice Harbor Dam would be pumped to bring 85,000 acres under cultivation. The 200,000 acre John Day Project is scheduled to be developed after the completion of John Day Dam, sometime in the 1970's. The 140,000 acre Upper Horse Heaven Project could be irrigated by diverting water from the Klikitat River. (Fig. 3) The Lower Horse Heaven Project, estimated to contain 127,000 acres, could be irrigated by pumping water from

MAY 1959

Fig. 83. A section of the Highlands Irrigation Project. Sections of darker gray are sagebrush lands waiting to be cleared. Kennewick and the Columbia River are in the background.

MAY 1959

Fig. 84. Ice Harbor Dam during construction time.

behind McNary Dam. In order for this project to develop, the water would have to be pumped to an elevation of 1040 feet. This is about 700 feet above the level of Wallula Lake.

If and when the proposed irrigation projects are completed, the Bureau of Reclamation predicts that approximately 15,000 additional farm families would be in this area. With this agricultural hinterland, the prospect for the continued development of the urban centers looks bright. It is difficult to ascertain just which of the three cities would develop most, since they are already connected by a transportation network, and are considered as one area in most respects. The commercial centers in each city already draw citizens of the other cities. Not only would the shopping districts expand to meet the needs of the farm families, but the development of canneries, frozen food storage plants, grain elevators, and warehouses would be developed.

Industrial Prospect

Dr. W. R. DeHollander, senior scientist in the Hanford laboratories, predicts that the whole Columbia River area may some day become the major chemical area of the United States. Since the Kennewick Port District has the available sites and has already established a chemical complex, this area is ripe for a sulphuric acid plant, caustic soda plant, and plants for bottled beverages and bleaches. The city of Kennewick is also predicted to continue to expand its role as a dormitory community since plant employees are attracted to Kennewick because of excellent home sites.

When the government decides to dispose of the Big Pasco Reconsignment Depot, the city of Pasco will regain its best industrial site. With a hinterland of the great Columbia Basin Project, industries for the processing of agricultural products seems likely.

Since Richland has only one industry, it is only as stable as the new atomic industry. But this industry doesn't seem to be on the way out. In August of 1958, the U. S. Congress authorized the construction of a $145 million reactor, the ninth in the area. The Plutonium Recycle Reactor is the first attempt at applying the atom for peaceful purposes. The reactor will have built-in features which would permit its conversion to produce electrical energy along with plutonium. Industrial development at Richland, other than the reactors themselves, would probably be industries to use plutonium by-products. Some of these radioisotopes could be used in the development of x-ray equipment and automatic measuring devices. Some means of extracting and packaging these isotopes has already been developed at Hanford, but this industry is still in the experimental stage of development.

Population Prospect

Although the official U. S. Census will not be taken until 1960, estimates by the U. S. Post Office Department place the population of the entire Tri-City Area now at about 94,700, a gain of 29,767 since 1950. Kennewick has had the largest increase in the last decade. Estimates show that this post office serves approximately 26,185 persons, or about twice as many as in 1950. The area within

the city limits, though, is estimated at 13,650 compared with 10,106 in 1950. Pasco is estimated at 14,000. An accurate count in Richland prior to incorporation in 1958 showed a population of 22,780. According to utility directors, city officials, and school directors, developments are just beginning to sprout in this area. General Telephone Company in Kennewick plans to meet customer expansion of a present 6,823 to 10, 079 by 1963. Pacific Telephone Company in Pasco expects to grow from 6,775 now, to 8,225 by 1961. Benton County Public Utility District has not only doubled its customer list since 1950, but it expects to double it again by 1970. School officials in each of the three cities predict an enrollment of nearly 7,000 each by 1965.[27]

City planning counselors have estimated that some time in the future, the Tri-Cities will be one continuous metropolitan area from Richland to Wallula Gap. The prospect for continued development of the Tri-Cities looks bright.

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[27] Tri-City Herald, (Pasco, Kennewick, Richland, Wash.) March 19, 1959.

BIBLIOGRAPHY

Books

Branson, E. D., and Tarr, W. A. Introduction to Geology. First Edition. McGraw Hill, 1935.

Goldhammer, Bernard. The Economic Base for Power Markets in Benton and Franklin Counties. Bonneville Power Administration, November, 1953.

Hanford. Published by the Atomic Energy Commission. Declassified on Nov. 1, 1955.

Hosmer, James K. History of the Expeditions of Captains Lewis and Clark. Chicago: A. C. McClury Co., 1902. Vol. II.

Illustrated History of the Big Bend Country. Spokane: Western Historical Publishing Co., 1904.

Lyman, W. D. History of the Yakima Valley. Seattle: S. J. Clarke Publ. Co., 1919. Vol. I.

Reeves, Belle. Current Washington History. Olympia: State Printer, 1944. Vol. II, No. 4.

Resources and Capabilities of Washington. Bureau of Statistics, Agriculture, and Immigration. Olympia: State Printer, 1901.

Salisbury, A. Here Rolled the Covered Wagons. Seattle: Superior Publ. Co., 1948.

Snowden, Clinton A. History of Washington. New York: Century Co., 1909.

The Story of Kennewick, Washington. Published for the Kennewick Chamber of Commerce. Portland: Western Lithograph Co., 1954.

U. S. Department of Agriculture, Weather Bureau. Climatic Summary of the United States. 1941.

VanArsdol, T., Hanford, The Big Secret. Pasco: Columbia Basin News, 1958.

Van Royen, William. The Agricultural Resources of the World. New York: Prentice Hall, 1954.

Victor, Mrs. Frances Fuller. The River of the West. Hartford, Conn. and Toledo, Ohio. 1870.

West, Leoti L. The Wide Northwest. Chicago: Shaw and Borden Co., 1927.

Newspapers

Christian Science Monitor. Boston, Massachusetts. November 8, 1948.

Columbia Basin News. Pasco, Washington. Selected Editions.

General Electric News. Richland, Washington. March 28, 1958.

Kennewick Courier Reporter. Kennewick, Washington. Selected Editions.

Pasco Herald. Pasco, Washington. July 30, 1931.

Pasco News. Pasco, Washington. Nov. 15, 1949.

Portland Morning Oregonian. Portland, Oregon. April 9, 1889.

Portland Sunday Oregonian. Portland, Oregon. December 13, 1944.

Seattle Times. Seattle, Washington. Selected Editions.

Seattle Post-Intelligencer. Seattle, Washington. Selected Editions.

Spokesman Review. Spokane, Washington. Selected Editions.

Sprague Herald. Sprague, Washington. December 15, 1882.

Tacoma Herald. Tacoma, Washington. November 27, 1879.

Tacoma News Tribune. Tacoma, Washington. Selected Editions.

The Dalles Mountaineer. The Dalles, Oregon. October 23, 1879.

The Villager. Richland, Washington. Selected Editions.

Tri-City Herald. Pasco, Kennewick, Richland, Washington. Selected Ed.

Twin-City Reporter. Pasco, Washington. April 4, 1910.

Walla Walla Union. Walla Walla, Washington. November 27, 1880.

Wenatchee World. Wenatchee, Washington. Selected Editions.

Yakima Herald. Yakima, Washington. Selected Editions.

Unpublished Material

"A Factual Appraisal of the Port of Kennewick Industrial Advantages". Prepared by the Kennewick Port District. September, 1956. (Mimeographed)

Bagley, C. B. "Scrapbook Number 1". University of Washington Library. (A book of newspaper clippings)

"History of Pasco". Prepared by the Pasco Chamber of Commerce. 1953. (Mimeographed)

"Kennewick Area and Community Economic Survey". Prepared by the Port of Kennewick. March, 1959. (Mimeographed)

Obrien, Elizabeth. "Pasco, from Sagebrush to Atoms". Unpublished term paper. Pasco Carnegie Library, 1949. (Typewritten)

Phillips, Earl L. "Climatological Summary of the Kennewick Weather Station". 1958. (Mimeographed)

"Richland - The Town the Atom Built". Prepared by the Atomic Energy Commission, 1957. (Mimeographed)

Sonderman, W. F. "History of Kennewick". Prepared for the Kennewick Commercial Club, July 1, 1926. (Typewritten)

"The Hanford Adventure". Prepared by the Atomic Energy Commission. 1957. (Mimeographed)

Thompson, Margaret. "Benton County Washington". Office of the County Superintendent of Public Instruction. 1954. (Mimeographed)

Interviews

Personal interview with Mrs. Albert Kent, 414 W. Kennewick Avenue, Kennewick, Washington. November 17, 1958. Mrs. Kent is the present president of the Benton County Historical Society. She was born in the Y. I. & I. Co. Hotel, and has lived in Kennewick most of her life.

Personal interview with Ralph Reed, 3708 W. Clearwater, Kennewick, Washington. April 14, 1959. Mr. Reed came to Kennewick in 1905. He was editor of the Kennewick Courier-Reporter from 1914 to 1945.

Personal interview with W. R. Cox, 519 W. Shoshone, Pasco, Washington. April 22, 1959. Mr. Cox, age 74, came to Pasco in 1909. He has held positions as Franklin County Auditor, Pasco Postmaster, and at present is president of the Mid-Columbia Bank in Pasco.

Personal interview with Adolph Neuman, 832 South Tenth Street, Pasco, Washington. April 24, 1959. Mr. Neuman has lived in Pasco since 1907.

Personal interview with E. C. Peddicord, 1730 Gaillard Place, Richland, Washington. May 6, 1959. Mr. Peddicord came to Richland in 1930. He was editor of the Benton County Advocate from 1933 to 1943. He was one of the few residents of Richland who were permitted to remain when the government gained control of the town. Since March, 1943, he has been the Richland Postmaster.

Personal interview with John Neuman, 216 South Benton, Kennewick, Wash. May 16, 1959. Mr. Neuman has been a business man in Kennewick since 1930. He is the present Kennewick Port District Manager.

Personal interview with Gus Reese, Rural Route, Kennewick, Washington. May 16, 1959. Mr. Reese farms a wheat ranch in the Horse Heaven Hills.

Personal interview with H. W. Des Granges, 1003 W. Kennewick Avenue, Kennewick, Washington. May 25, 1959. Mr. Des Granges, age 89, was Mayor of Kennewick in 1923 and 1924. He operated the Yakima Fruit Growers Association Warehouse for twenty-seven years.

Personal interview with A. C. Amon, 506 N. Mayfield, Kennewick, Wash. May 26, 1959. Mr. Amon was Mayor of Kennewick from 1930 to 1936, and again from 1940 to 1944.

Personal interview with Jay Perry, 2306 South Garfield, Kennewick, Washington. May 28, 1959. Mr. Perry came to Kennewick in 1904. He was a member of the first high school graduating class in 1908. He was Benton County Commissioner from 1933 to 1953.